ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

DRAFT

Mr. Reginald Anderson, General Manager III
Belews Creek Steam Station
Duke Energy Carolinas LLC
3195 Pine Hall Rd.
Belews Creek, NC 27009

SUBJECT: Air Quality Permit No. 01983T34
Facility ID: 8500004
Duke Energy Carolinas LLC - Belews Creek Steam Station
Walnut Cove, Stokes County, North Carolina
Fee Class: Title V
PSD Class: Major

Dear Mr. Anderson:

In accordance with your completed Air Quality Permit Applications for a Prevention of Significant Deterioration modification of a Title V permit received June 8, 2018, we are forwarding herewith Air Quality Permit No. 01983T34 to Duke Energy Carolinas LLC, Belews Creek Steam Station, Walnut Cove, Stokes County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as "ATTACHMENT 1" to this cover letter. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Stokes County has triggered increment tracking under PSD for PM-10 and SO_2. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from _____until January 31, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. The changes made to the permit are summarized in the attachment to this letter. Should you have any questions concerning this matter, please contact Edward L. Martin, P.E., at (919) 707-8739 or ed.martin@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4
Winston-Salem Regional Office
Connie Horne (cover letter only)
Central Files

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source I.D.	Emission Source Description
IES-1	Coal pile and coal handling system - fugitive emissions. Includes coal pile, coal unloading operations, conveyors, crusher operations, feed systems, etc. Also includes fugitive emissions of propylene as a result of spraying coal-handling belts for freeze protection.
IES-2	Ash and ash handling system - fugitive emissions. Includes ash removal system, ash loading system, leaks in ash collection pipes and hopper system, emissions during maintenance, hopper cleaning, hauling of ash in trucks, truck loading operations, duct vacuum truck unloading, and associated operations.
IES-9	260,000 gallon above ground main fuel-oil storage tank for No. 2 diesel fuel, and associated unloading stations, contract awarded on tank prior to 6/11/73
IES-10	Four storage tanks in the tractor shed storing transmission fluid, hydraulic oil, and motor oil (total capacity of 1,750 gallons: three 500-gallon tanks; one 250-gallon tank)
IES-12	four fuel oil storage tanks, 3,200 gallon total capacity
IES-13	Fuel oil drain tank, 550 gallon capacity
IES-14	Three diesel fuel oil storage tanks (two 2,000 gallon tanks; one 1,000 gallon tank)
IES-17	2,500 gallon underground gasoline storage tank
IES-20	4,000 gallon aboveground tank for storage of used oil
IES-24	Two main turbine-cooling oil tanks, 41,800 gallon total capacity
IES-25	Two transfer turbine-cooling oil tanks, 48,000 gallon total capacity
IES-30	Four aboveground tanks for storage of boiler feed pump turbine lube-oil, 750 gallon capacity each
IES-31	Lube oil drums, 300 gallon total, associated with ash handling operations
IES-39	Above-ground sulfur storage tank
IES-40	Above-ground sulfuric acid (H2SO4) storage tanks
IES-41	Non-stack emissions of ammonia
IES-55	Vents from groundwater monitoring wells for areas contaminated with diesel fuel, gasoline, etc.
IES-59	Open burning for fire brigade training
I-60	One dry ash landfill and one gypsum landfill.
IES-61	Six anhydrous ammonia storage tanks (60,000 gallons capacity, each)
IES-64	1,600 gallon above ground diesel fuel oil storage tank
IES-65	190 gallon above ground diesel fuel oil storage tank
IES-67	One 36 inches wide gypsum collection conveyor (ID No. IS-25 (GCB))
IES-68	Two 30 inches wide gypsum transfer conveyors (ID Nos. IS-27 (GCB1) and IS-28 (GCB2))
IES-69	One 30 inches wide gypsum disposal conveyor (ID No. IS-30 (GDC))
IES-70	One 30 inches wide gypsum radial stacker (ID No. IS-31 (GRS))
IES-71	Two emergency wet gypsum storage piles
IES-73	Gypsum disposal piles
IES-74	Limestone belt reclaim calibration process (using front end loader)
I-75	One 75 gallon diesel fuel storage tank
I-76	One 366 gallon diesel fuel storage tank
I-80	Three solvent based parts washers
IES-83	One 500-gallon diesel fuel storage tank associated with the black-out protection system
IES-84	One 550-gallon kerosene storage tank
IES-88	One 200-gallon diesel fuel oil storage tank for the emergency fire pump (IGEN-37(FP))
IES-89	One 100-gallon diesel fuel oil storage tank for the emergency use water pump (ES-23(EQWP))

Emission Source I.D.	Emission Source Description
IES-90	One 250-gallon propane storage tank for the 60 kW backup emergency propane generator (IGEN-EmGenLF)
IES-91	One permanent 550-gallon diesel fuel oil storage tank on-site used by contractors
IES-92	One 100-gallon propane storage tank for the backup emergency propane generator (IGEN-85EmGen)
IES-93 **(MACT, ZZZZ)**	One No. 2 fuel oil-fired emergency air compressor (110 horsepower)
IGEN-5 (AC) **(MACT, ZZZZ)**	One No. 2 fuel oil-fired emergency air compressor (525 horsepower)
IGEN-34 **(MACT, ZZZZ; NSPS, IIII)**	One diesel-fired emergency-use engine (37.1 horsepower)
IGEN-35 **(MACT, ZZZZ; NSPS, IIII)**	One diesel-fired emergency-use engine (364 horsepower)
IGEN-36 (EmGen) **(MACT, ZZZZ)**	One propane-fired emergency generator (13.7 horsepower) located at the microwave tower (Model Nov. 2005)
IGEN-37(FP) **(MACT, ZZZZ)**	One diesel-fired emergency fire pump (440 horsepower, Model Jan. 2006)
IGEN-EmGenLF **(NSPS, JJJJ; MACT ZZZZ)**	One propane-fired emergency generator (60 kilowatts) located at the microwave tower (Model Year 2012)
IGEN-85EmGen **(MACT, ZZZZ)**	One propane-fired standby emergency generator (54 horsepower, Model Year 2007)
IES-T01	One diesel fuel storage tank (2,000 gallon capacity)
IES-T02	One diesel fuel storage tank (1,000 gallon capacity)
IES-T03	One gasoline fuel storage tank (275 gallon capacity)
I-DF1	One diesel fuel dispensing facility (for IES-T01)
I-DF2	One diesel fuel dispensing facility (for IES-T02)
I-DF3	One gasoline fuel dispensing facility (for IES-T03)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100, "Control of Toxic Air Pollutants", or 15A NCAC 02Q .0711, "Emission Rates Requiring a Permit".

3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide

Attachment 2 to Cover Letter to Air Quality Permit 01983T34
Duke Energy Carolinas LLC - Belews Creek Steam Station

Table of Changes

The following changes were made to the Duke Energy Carolinas LLC - Belews Creek Steam Station Air Permit No. 01983T33:

Old Page	Old Section	New Page	New Section	Description of Change(s)
cover	--	cover	--	Amended permit numbers and dates.
3-8	1, table of permitted emission sources	3-8	1, table of permitted emission sources	Revised emission source description for ES-1 and ES-2 from "No. 2 fuel oil/coal-fired electric utility boiler" to "natural gas/coal-fired electric utility boiler." Revised emission source description for ES-3 (AuxB1) and ES-4 (AuxB2) from "Two No. 2 fuel oil-fired (propane for start-up only) auxiliary boilers" to "Two natural gas-fired auxiliary boilers." Added sources: ES-34a, ES-34b, ES-34c, ES-34d and ES-PIGGING. Added second sentence to footnote 1. Added footnotes 8 and 9.
9	2.1.A, equipment description	9	2.1.A, equipment description	Revised from "coal/No. 2 fuel oil-fired electric utility boilers" to "natural gas/coal-fired electric utility boilers" Added note that the Permittee may operate these sources on oil under the provisions in Permit No. 01983T33 until the conversion to natural gas is complete.
9-10	2.1.A, regulation table	9-10	2.1.A, regulation table	Replaced oil with gas for 15A NCAC 02D .0519 limits. Added 15A NCAC 02D .0530, 15A NCAC 02D .0530(u) and 15A NCAC 02Q .0504.
11	2.1.A.2	11	2.1.A.2	Replaced oil with gas.
11	2.1.A.2.c	11	2.1.A.2.c	Removed redundant emission limits.
19	2.1.A.10.a	19	2.1.A.10.a	Replaced No. 2 fuel oil with natural gas.
--	--	28-30	2.1.A.12	Added 15A NCAC 02D .0530 PSD condition.
--	--	30	2.1.A.13	Added 15A NCAC 02D .0530(u) condition.
29	2.1.B, equipment description	31	2.1.B, equipment description	Revised from "No. 2 oil/propane" to "natural gas." Added note that the Permittee may operate these sources on oil under the provisions in Permit No. 01983T33 until the conversion to natural gas is complete.
29	2.1.B, regulation table	31	2.1.B, regulation table	Added 15A NCAC 02D .0530, 15A NCAC 02D .0530(u) and 15A NCAC 02Q .0504.

30	2.1.B.3.c, d and e	32	2.1.B.3.c	Removed monitoring, recordkeeping and reporting for visible emissions.
31	2.5.B.5	33	2.1.B.5	Added note that this section is not shielded pursuant to 15A NCAC 2Q .0512(a). Added statement to allow operation under the Subpart DDDDD limited-use boiler provisions in Permit No. 01983T33 until startup on natural gas.
31	2.1.B.5.a	33	2.1.B.5.a	Revised requirements from limited-use boilers to the *Unit designed to burn gas 1 subcategory*. Removed noncompliance statements.
31	2.1.B.5.b	--	removed	
32	2.1.B.5.i	34	2.1.B.5.h	
32	2.1.B.5.j	34	2.1.B.5.i	
--	added	34	2.1.B.5.k	
32	2.1.B.5.m.i	34	2.1.B.5.l.i	
33	2.1.B.5.p	35	2.1.B.5.n	
--	--	35-36	2.1.B.6	Added 15A NCAC 02D .0530 PSD condition.
--	--	36-37	2.1.B.7	Added 15A NCAC 02D .0530(u) condition.
50	2.1.J.4.b	--	--	Removed reporting requirement to notify the Regional Office in writing of the date of beginning operation of sources and control devices ID Nos. ES-TS-1, CD-BF-7 and CD-BF-6 since this has been completed.
--	--	55-58	2.1.K	Added this section for the new natural gas-fired natural gas supply line heaters ES-34a, ES-34b, ES-34c, ES-34d.
--	--	59-60	2.1.L	Added this section for the natural gas supply line pigging operation ES-PIGGING.
54-62	2.2.D.1.a	64-71	2.2.D.1.a	Revised toxic emission limits.
--	--	71-72	2.2.D.2	Added TPER limit condition.
--	--	72	2.2.E.1	Added requirement to file an amended application for completion of the two-step significant modification process within one year from the date the first of sources ES-1, ES-2, ES-3, ES-4, ES-34a, ES-34b, ES-34c, ES-34d or ES-PIGGING begins to burn natural gas.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
01983T34	01983T33	DRAFT	January 31, 2022

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Duke Energy Carolinas, LLC – Belews Creek Steam Station**
Facility ID: **8500004**

Facility Site Location: **3195 Pine Hall Road**
City, County, State, Zip: **Walnut Cove, Stokes County, NC 27052**

Mailing Address: **3195 Pine Hall Road**
City, State, Zip: **Belews Creek, NC 27009**

Application Numbers: **8500004.18A**
Complete Application Date: **June 8, 2018**

Primary SIC Code: **4911**
Division of Air Quality, Regional Office Address: **Winston-Salem Regional Office**
450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105

Permit issued this the ___ day of _____, 201x.

_____
William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
9, 72, 73, 75	ES-1 **(CAM; MACT, UUUUU)**	One natural gas/coal[1]-fired electric utility boiler (12,000 million Btu per hour heat input) equipped with alkaline-based fuel additive[2] (U1 Boiler)	CD-1 (U1FGTs) and CD-1A (U1FGTa)	Flue gas conditioning systems consisting of: An integral sulfur trioxide generator (450 pounds per hour of sulfur input) [ID No. CD-1 U1FGTs] and An anhydrous ammonia injection system (121.5 pounds per hour maximum ammonia injection rate) [CD-1A (U1FGTa)]
			CD-3 (U1ESP)	One cold-side electrostatic precipitator (974,600 square feet of plate area)
			CD-2 (U1LNB/OFA)	One low NOx burner system employing over fire air
			CD-2A (U1SCR)[9]	selective catalytic reduction (SCR)
			CD-U1DSI[3]	Hydrated lime dry sorbent injection
			CD (U1FGDa) and CD (U1FGDb)	Wet Flue Gas Desulfurization system consisting of: two spray tower absorbers in parallel (approximately 153 gal/min maximum (total a and b absorbers) limestone slurry injection rate)

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
9, 72, 73, 76	ES-2 **(CAM; MACT, UUUUU)**	One natural gas/coal[1]-fired electric utility boiler (12,000 million Btu per hour heat input) equipped with alkaline-based fuel additive[2] (U2 Boiler)	CD-4 (U2FGTs) and CD-4A (U2FGTa)	Flue gas conditioning systems consisting of: An integral sulfur trioxide generator (450 pounds per hour of sulfur input) [ID No. CD-4 (U2FGTs)][2] and An anhydrous ammonia injection system (121.5 pounds per hour maximum ammonia injection rate) [CD-4A (U2FGTa)]
			CD-6 (U2ESP)	One cold-side electrostatic precipitator (974,600 square feet of plate area)
			CD-5 (U2LNB/OFA)	One low NOx burner system employing over fire air
			CD-5A (U2SCR)[9]	selective catalytic reduction (SCR)
			CD-U2DSI[4]	Hydrated lime dry sorbent injection
			CD (U2FGDa) and CD (U2FGDb)	Wet Flue Gas Desulfurization system consisting of: two spray tower absorbers in parallel (approximately 153 gal/min maximum (total a and b absorbers) limestone slurry injection rate)
31, 72, 73, 74	ES-3 (AuxB1) and ES-4 (AuxB2) **(Case-By-Case MACT; MACT, DDDDD)**	Two natural gas-fired auxiliary boilers (172 million Btu per hour heat input, each)	N/A	N/A
37, 64	ES-4a (EmGen) **(MACT, ZZZZ[5])**	One No. 2 fuel oil-fired emergency/ blackout protection diesel generator (2,000 kilowatts)	N/A	N/A

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
39, 61, 63, 64	ES-6 (RUL)	Limestone rail unloading station	CD (RULBf)	One pulse jet bagfilter (4:1 to 5:1 gas-to-cloth ratio)
39, 61, 63, 64	ES-6a (RULa) and ES-6b (RULb) **(NSPS, OOO)**	Two limestone rail unloading hoppers		
39, 61, 63, 64	ES-7 (LUBF) **(NSPS, OOO)**	72 inches wide limestone rail unloading belt feeder (3,000 tons per hour maximum capacity)		
39, 61, 65	ES-8 (LCB1) **(NSPS OOO)**	48 inches wide limestone unloading conveyor (2,500 tons per hour maximum capacity)	N/A	N/A
39, 61, 65	ES-10 (LCB2)	48 inches wide limestone stack out conveyor (2,500 tons per hour maximum capacity)	N/A	N/A
45, 61, 65	F1	Limestone stockpile	N/A	N/A
39, 61, 65	ES-11a (LRGF) **(NSPS, OOO)**	40 inches wide limestone reclaim grate feeder (400 tons per hour maximum capacity)	N/A	N/A
39, 61, 65	ES-11b (LCB3) **(NSPS, OOO)**	30 inches wide limestone reclaim conveyor (400 tons per hour maximum capacity)	N/A	N/A
39, 61, 63, 65	ES-13a (LCB3a) **(NSPS, OOO)**	30 inches wide limestone plant feed conveyor (400 tons per hour maximum capacity)	CD (LPTTBf)	One pulse jet bagfilter (4:1 to 5:1 gas-to-cloth ratio)

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
39, 61, 63, 65	ES-15 (SCB4) **(NSPS, OOO)**	30 inches wide limestone silo fill conveyor 1 (400 tons per hour maximum capacity)		
39, 61, 63, 65	ES-16 (SCB5) **(NSPS, OOO)**	30 inches wide limestone silo fill conveyor 2 (400 tons per hour maximum capacity)		
39, 61, 63, 65	ES-17 (LS1) **(NSPS, OOO)**	Limestone storage silo 1 (34,461 cubic feet capacity)		
39, 61, 63, 65	ES-18 (LS2) **(NSPS, OOO)**	Limestone storage silo 2 (34,461 cubic feet capacity)		
39, 61, 66	ES-19 (LCB6) **(NSPS, OOO)**	30 inches wide limestone weigh feeder belt for silo 1 (400 tons per hour maximum capacity)	N/A	N/A
39, 61, 66	ES-20 (LCB7) **(NSPS, OOO)**	30 inches wide limestone weigh feeder belt for silo 2 (400 tons per hour maximum capacity)	N/A	N/A
39, 61, 66	ES-21 (BM1) **(NSPS, OOO)**	Limestone wet ball mill 1 (58 tons per hour maximum capacity)	N/A	N/A
39, 61, 66	ES-22 (BM2) **(NSPS, OOO)**	Limestone wet ball mill 2 (58 tons per hour maximum capacity)	N/A	N/A
44, 64	ES-23 (EQWP) **(MACT, ZZZZ[5])**	Emergency quench water pump (1,610 horsepower)	N/A	N/A
45, 61, 66	ES-33a (Silo,wwtf)	Lime storage silo (for wastewater treatment facility) (8,000 cubic feet capacity)	CD-wwtfBfa	pulse jet bagfilter (4:1 to 5:1 gas-to-cloth ratio)
45, 61, 66	ES-33b (Silo,wwtf)	Lime storage silo (for wastewater treatment facility) (8,000 cubic feet capacity)	CD-wwtfBfb	pulse jet bagfilter (4:1 to 5:1 gas-to-cloth ratio)
47	F3	Wastewater treatment facility (bioreactor)	N/A	N/A
48, 67	ES-U1SorbSilo	Unit 1 hydrated lime storage silo	CD-U1SorbSiloBf	hydrated lime U1 dry sorbent silo bin vent filter pulse jet bagfilter (4:1 air-to-cloth ratio)
48, 67	ES-U2SorbSilo	Unit 2 hydrated lime storage silo	CD-U2SorbSiloBf	hydrated lime U2 dry sorbent silo bin vent filter pulse jet bagfilter (4:1 air-to-cloth ratio)

Page No(s).	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
48, 67	ES-U1WHopper1	Unit 1 Weigh hopper 1	CD-U1WH1Bf	U1 weigh hopper 1 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
48, 67	ES-U1Whopper2	Unit 1 Weigh hopper 2	CD-U1WH2Bf	U1 weigh hopper 2 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
48, 67	ES-U1Whopper3	Unit 1 Weigh hopper 3	CD-U1WH3Bf	U1 weigh hopper 3 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
48, 67	ES-U2WHopper1	Unit 2 Weigh hopper 1	CD-U2WH1Bf	U2 weigh hopper 1 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
48, 67	ES-U2Whopper2	Unit 2 Weigh hopper 2	CD-U2WH2Bf	U2 weigh hopper 2 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
48, 67	ES-U2Whopper3	Unit 2 Weigh hopper 3	CD-U2WH3Bf	U2 weigh hopper 3 bin vent pulse jet bagfilter (2:1 air-to-cloth ratio)
51, 67	ES-TS-1[6]	Units 1 and 2 dry flyash transfer system	CD-BF-7[6]	Bagfilter (1,700 dscfm)
51, 68	SILO-3[7]	Flyash storage and handling silo	BF-5[7]	Bagfilter (5,612 square feet of filter area)
51, 69	SILO-5[7]	Flyash storage and handling silo	CD-BF-6[6]	Silo 3/5 bagfilter (5,598 square feet of filter area)
51, 68	SILO-4[7]	Flyash storage and handling silo	BF-4[7]	Bagfilter (2,144 square feet of filter area)
51, 68	DFAL-4a[7]	Dry flyash truck loading station		
51, 69	DFAL-4b[7]	Dry flyash truck loading station	CF-4b[7]	Cartridge filter (2,140 square feet of filter area)
51, 69	WFAL-3[7]	Wet flyash truck loading station	FAC-3[7]	Flyash conditioner injection (minimum 15 percent water injection by weight)
51, 70	WFAL-5[7]	Wet flyash truck loading station	FAC-5[7]	Flyash conditioner injection (minimum 15 percent water injection by weight)
51, 68	DOME-1[7]	Flyash storage dome	DBF-1[7]	Bagfilter (861 square feet of filter area)
55, 72	ES-34a, ES-34b, ES-34c, and ES-34d[8] **(MACT, DDDDD)**	Four natural gas-fired, natural gas supply line heaters, rated at 8 million Btu per hour, each	N/A	N/A
59, 71, 72	ES-PIGGING[8]	Natural gas supply line pigging operation including fugitive emissions from pig receiver vent and temporary flaring of natural gas from supply line	CD-PIG FLARE[8]	Temporary flare system used to combust excess natural gas from supply line during pigging operation (5,100 mmBtu per hour maximum rated natural gas heat input).

1 Incidental spills of oil, antifreeze, and lube oil contained on the coal pile and coal storage from mobile equipment is allowed to be burned in these boilers. Boilers use natural gas as start-up fuel and for supplemental firing up to approximately 50 percent of the maximum continuous rating.

2 Alkaline-based fuel additive may be used on an as-needed basis, not to exceed 7 pounds per ton of coal burned. Fuel additives shall not contain any toxic air pollutants listed in 15A NCAC 02Q .0711. Trona and any fuel additive products not equivalent to those specified in Application 8500004.13A are not allowed without permit modification.

3 Unit 1 control device CD-U1DSI consists of: Unit 1 hydrated lime storage silo (ID No. ES-U1SorbSilo), Unit 1 Weigh hopper 1 (ID No. ES-U1WHopper1), Unit 1 Weigh hopper 2 (ID No. ES-U1Whopper2), and Unit 1 Weigh hopper 3 (ID No. ES-U1Whopper3).

4 Unit 2 control device CD-U2DSI consists of, Unit 2 hydrated lime storage silo (ID No. ES-U2SorbSilo), Unit 2 Weigh hopper 1 (ID No. ES-U2WHopper1), Unit 2 Weigh hopper 2 (ID No. ES-U2Whopper2), and Unit 2 Weigh hopper 3 (ID No. ES-U2Whopper3).

5 This source is subject to 40 CFR Part 63, Subpart ZZZZ. However, according to §63.6590(b)(3)(iii), these engines do not have to meet the requirements of this rule.

6 This emission source (ID No. ES-TS-1) and control devices (ID Nos. CD-BF-7 and CD-BF-6) are listed as a 15A NCAC 02Q .0501(c)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

7 These emission sources and control devices (ID Nos. SILO-3, SILO-5, SILO-4, DFAL-4a, DFAL-4b, WFAL-3, WFAL-5, DOME-1, BF-5, BF-4, CF-4b, FAC-3, FAC-5 and DBF-1) are listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on January 30, 2018. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source pursuant to 15A NCAC 02Q .0515(f).

8 These emission sources (ID Nos. ES-34a, ES-34b, ES-34c, ES-34d and ES-PIGGING) and control device (ID No. CD-PIG FLARE) are listed as a 15A NCAC 02Q .0501(c)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

9 The SCR NOx control system may be operated intermittently as necessary, based on boiler system requirements, to maintain compliance with applicable regulatory requirements.

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Two natural gas/coal-fired electric utility boilers equipped with alkaline-based fuel additive (ID Nos. ES-1 and ES-2), and associated flue gas conditioning systems (ID Nos. CD-1, CD-1A, CD-4, and CD-4A), low NOx burner systems (ID Nos. CD-2 and CD-5), SCR (ID Nos. CD-2A and CD-5A), hydrated lime dry sorbent injection (ID Nos. CD-U1DSI and CD-U2DSI, electrostatic precipitators (ID Nos. CD-3 and CD-6), and wet Flue Gas Desulfurization systems (ID Nos. CD (U1FGDa), CD (U1FGDb), CD (U2FGDa) and CD (U2FGDb))

The Permittee may operate these sources on oil under the provisions in Permit No. 01983T33 until the conversion to natural gas is complete.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	1.02 pounds per million Btu heat input	15A NCAC 02D .0501(e)
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rule Requirements See Section 2.1 A.9.	40 CFR Part 97, Subpart CCCCC
Nitrogen Oxides	**When burning only coal** 1.8 pounds per million Btu heat input	15A NCAC 02D .0519
	When burning only gas 0.8 pounds per million Btu heat input	
	When burning coal and gas See Section 2.1 A.2.	
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rule Requirements See Section 2.1 A.9.	40 CFR Part 97, Subparts AAAAA and BBBBB
Visible Emissions	See Section 2.1 A.3.	15A NCAC 02D .0521*
	State-Enforceable Only Units 1 and 2: 17 percent annual average opacity (each)	15A NCAC 02D .0536*
Particulate Matter	**As determined by stack test:** 0.15 pounds per million Btu heat input **As determined by PM CEMS:** 0.030 pounds per million Btu heat input (or 0.30 pounds	15A NCAC 02D .0536*

Regulated Pollutant	Limits/Standards	Applicable Regulation
	per MWh)	
	For periods when the compliance option under Section 2.1 A.3.a.i [COMS] is used: monitoring for ESP	15A NCAC 02D .0614 **CAM** (40 CFR Part 64)
n/a	Maintain a malfunction abatement plan See Section 2.1 A.6.	15A NCAC 02D .0535
Excess Emissions	See Section 2.1 A.7.	15A NCAC 02D .0606*
Toxic Air Pollutants	**State-Enforceable Only** See Section 2.1 A.8.	15A NCAC 02D .1100
Hazardous Air Pollutants	See Section 2.1 A.11	15A NCAC 02D .1111 (40 CFR 63 Subpart UUUUU)
Carbon Monoxide and VOCs	See Section 2.1.A.12	15A NCAC 02D .0530
Various	See Section 2.1.A.13	15A NCAC 02D .0530(u)
–	See Section 2.2.E.1	15A NCAC 02Q .0504

* The permit conditions for 15A NCAC 02D .0521, 02D .0536 and 02D .0606 have two mutually exclusive options for monitoring, recordkeeping and reporting using either COMS or PM CEMS as defined in specific conditions.

1. 15A NCAC 02D .0501(e): COMPLIANCE WITH EMISSION CONTROL STANDARDS

a. In addition to any control or manner of operation necessary to meet emission standards in 15A NCAC 02D .0500, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards of 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in 15A NCAC 02D .0500 are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

b. For the Flue Gas Desulfurization systems (**ID No. CD(U1FGDa) and CD(U1FGDb)**) and stack on Unit 1, emissions of sulfur dioxide from this source shall not exceed 1.02 pounds per million Btu heat input in accordance with the permit application received May 16, 2005 and modeling analysis of May 2005. For the Flue Gas Desulfurization systems (**ID No. CD(U2FGDa) and CD(U2FGDb)**) and stack on Unit 2, emissions of sulfur dioxide from this source shall not exceed 1.02 pounds per million Btu heat input in accordance with the permit application received May 16, 2005 and modeling analysis of May 2005. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 02D .0608]

d. The Permittee shall ensure compliance with 15A NCAC 02D .0501(e) by determining sulfur dioxide emissions in pounds per million Btu using continuous emissions monitoring (CEM) systems meeting the

requirements of 40 CFR Part 75 except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with sulfur dioxide emission standards shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any 24-hour block average exceeds the limits in Section 2.1 A.1.b., and/or if records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the continuous emissions monitoring data showing the 24-hour daily block values in pounds per million Btu for each 24-hour daily block averaging period during the reporting period postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

f. **CEMs Availability** - The Permittee shall submit sulfur dioxide CEM systems monitor downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

2. 15A NCAC 02D .0519: CONTROL OF NITROGEN OXIDES EMISSIONS

a. Emissions of nitrogen oxides from these sources when burning coal and/or natural gas shall be calculated by the following equation:

$$E = [(Ec)(Qc) + (Eo)(Qo)]/Qt$$

Where:
- E = emission limit for combined burning of coal and gas in pounds per million Btu heat input
- Ec = 1.8 pounds per million Btu heat input for coal only
- Eo = 0.8 pounds per million Btu heat input for gas
- Qc = coal heat input in Btu per hour
- Qo = gas heat input in Btu per hour
- Qt = Qc + Qo

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall ensure compliance with 15A NCAC 02D .0519 by determining nitrogen oxide emissions in pounds per million Btu using a continuous emissions monitoring (CEM) system meeting the requirements of 40 CFR Part 75 except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with this emission standard shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any 24-hour block

average exceeds the emission limit, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

d. The Permittee shall maintain records of monthly coal and gas consumption (written or electronic form) and shall submit such records within 30 days of a request by DAQ. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519 if these records are not maintained.

Reporting [15A NCAC 02Q .508(f)]

e. The Permittee shall submit the continuous emissions monitoring system data showing the 24-hour daily block values for periods of excess nitrogen oxide emissions postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. If no excess emissions were measured during a six-month period, the Permittee shall submit a summary report stating that there were no excess emissions for the period. All instances of deviations from the requirements of this permit must be clearly identified.

f. **CEMs Availability** - The Permittee shall submit the nitrogen oxide CEM systems monitor downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. The Permittee shall either:
   i. install, maintain, and operate a COMS for measuring the opacity of emissions, or
   ii. install, maintain, and operate a PM CEMS.

The Permittee shall submit a written notification to the NCDAQ of the intent to demonstrate compliance using the option under Section 2.1 A.3.a.i [COMS] or Section 2.1 A.3.a.ii [PM CEMS] at least 30 calendar days before changing the compliance monitoring option.

b. **For periods when the compliance option under Section 2.1 A.3.a.i [COMS] is used,** compliance with the **40 percent opacity** limit shall be determined as follows:
   i. No more than four six-minute periods shall exceed the opacity standard in any one day.
   ii. The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.
   iii. Excess emissions during startup and shutdown shall be excluded from the determinations in Sections 2.1 A.3.b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(g). Excess emissions during malfunctions shall be excluded from the determinations in Sections 2.1 A.3.b.i and b.ii above, if the excess emissions are exempted according to the procedures set out in 02D .0535(c).
   iv. All periods of excess emissions shall be included in the determinations in Sections 2.1 A.3.b.i and b.ii above until such time that the excess emissions are exempted according to the procedures in 02D .0535.

c. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** visible emissions shall not be more than **40 percent opacity** when averaged over a six-minute period except that six-minute periods averaging not more than 90 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 02D .0521(c)]

Testing [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

e. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** opacity shall be measured using an opacity monitoring system that meets the performance specifications of Appendix B of 40 CFR Part 60. The opacity monitoring system shall be subjected to a quality assurance program approved by the director. The Permittee, for each unit subject to 02D .0521(g) shall have on file with the director an approved quality assurance program, and shall submit to the director within the time period of his request for his approval a revised quality assurance program, including at least procedures and frequencies for calibration, standards traceability, operational checks, maintenance, auditing, data validation, and a schedule for implementing the quality assurance program. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if the monitoring is not performed, if the monitored values exceed the limitations given above, or if the records are not maintained.

f. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** no monitoring/recordkeeping is required to demonstrate compliance with 15A NCAC 02D .0521.

Reporting [15A NCAC 02Q .0508(f)]

g. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** the Permittee shall submit excess emissions and monitoring system performance reports for the COMS data in accordance with the reporting requirements given in Section 2.1.A.7.d postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. The report shall include, at a minimum, the information required in 40 CFR 60.7(c) and shall include all six-minute periods of excess emissions including all six-minute periods exempted during startup, shutdown and malfunction.

h. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used**, no reporting is required to demonstrate compliance with 15A NCAC 02D .0521.

i. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0536: PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS

a. Emissions of particulate matter from these sources shall not exceed 0.15 pounds per million Btu heat input.

b. The Permittee shall obtain an air permit before installing or enabling Energy Management System (EMS) capability.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0536.

d. A stack test shall be conducted for particulate matter in accordance with either Method 5 at a sample temperature of $320^{o} \pm 25^{o}$ F as described in §63.10010(i)(1) or Method 5B of Appendix A of 40 CFR Part 60 once per calendar year. In the event that a boiler exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within 6 months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests. If the result of any test is greater than the limits given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0536.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

e. **For periods when the compliance option under Section 2.1 A.3.a.i [COMS] is used,** compliance with the particulate limit in Section 2.1 A.4.a shall be demonstrated through the Compliance Assurance Monitoring (CAM) Plan given in Section 2.1 A.10. The Permittee shall ensure the continuous opacity monitor system (COMS) utilized in the CAM Plan meets the requirements of 15A NCAC 02D .0613. If the Permittee does not demonstrate compliance with the CAM plan given in Section 2.1 A.10, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0536.

f. **For periods when the compliance option under Section 2.1 A.3.a.ii [PM CEMS] is used**, compliance with the particulate limit in Section 2.1.A.4.a shall be demonstrated using PM CEMS. A measured exceedance of the pounds per million Btu heat input or pounds per MWh values below shall be a violation of the corresponding emission standards in Section 2.1.A.4.a.

Unit 1 Boiler - 0.030 pounds per million Btu heat input (30-boiler operating day rolling average), or 0.30 pounds per MWh (30-boiler operating day rolling average)
Unit 2 Boiler - 0.030 pounds per million Btu heat input (30-boiler operating day rolling average), or 0.30 pounds per MWh (30-boiler operating day rolling average)

i. The Permittee shall install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS according to the applicable Maximum Achievable Control Technology (MACT) standards in §63.10010(i) of 40 CFR Part 63 Subpart UUUUU, as specified in Section 2.1.A.11.bb. The PM CEMS shall meet the requirements of Performance Specification PS-11 of Appendix B of 40 CFR Part 60. The Permittee shall have on file with the director an approved quality assurance program, and shall submit to the director within the time period of his request for his approval a revised quality assurance program to include the provisions of 40 CFR 60, Appendix F, Procedure 2 for the PM CEMS.

ii. The PM emission rate shall be determined based on a 30-boiler operating day rolling average of the hourly arithmetic average emissions concentrations using the CEMS outlet data for each boiler operating day (as defined below), except for data obtained during periods of startup or shutdown. Periods of malfunction shall be included in the emissions calculations.

> A *boiler operating day* means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the EGU, excluding startup periods or shutdown periods. It is not necessary for the fuel to be combusted the entire 24-hour period.

iii. Data from the PM CEMS shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of 40 CFR Part 63 are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2. [§63.8(g)(2)]

iv. PM CEMS monitor availability shall be calculated and reported.

v. The Permittee shall record the output of the PM CEMS as specified in Section 2.1.A.11.dd.

If the results of the arithmetic 30-boiler operating day rolling average PM CEMS concentration exceeds the limit in this section or any of the above requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0536.

g. The collected flyash shall not be reinjected into the electric utility boilers (**ID Nos. ES-1 and ES-2**). If the collected flyash is reinjected into these boilers, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0536.

Reporting [15A NCAC 02D .0536]

h. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** the Permittee shall submit the results of all monitoring performed in Section 2.1.A.4.e above within 30 days of a written request by the DAQ.

i. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** the Permittee shall submit excess emissions and monitoring system performance reports for PM in accordance with the reporting requirements given in Section 2.1.A.7.d postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. The compliance report shall include, at a minimum, the information required in 40 CFR 63.10 and contain the information specified in Section 2.1.A.11.qq, along with all 30-boiler operating day rolling average excess emissions (pounds per million Btu or pounds per MWh) using the CEMS outlet data, including periods exempted during periods of startup and shutdown.

j. The results of any stack test shall be reported within 30 days, and the test report shall be submitted within 60 days after the test.

k. All instances of excess emissions must be clearly identified.

State-Enforceable Requirement

5. 15A NCAC 02D .0536: PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS (Annual average opacity for electric utility boilers)

a. Visible emissions from the utility boiler units shall not exceed 17 percent annual average opacity (AAO). The average is the sum of the measured non-overlapping six-minute averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping six-minute averages. Start-up, shut-down, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included.

Monitoring/Recordkeeping [15A NCAC 02D .0536]

b. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** the Permittee shall calculate each day an annual average opacity value for the most recent 365-day period ending with the end of the previous day. The average is the sum of the measured non-overlapping six-minute averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping six-minute averages. Start-up, shut-down, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included.

c. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** the Permittee shall calculate each day an annual average opacity value for the most recent 365-day period ending with the end of the previous day. The average is the sum of the measured non-overlapping one-hour averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping one-hour averages. Start-up, shut-down, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included. The hourly opacity values shall be determined using the PM CEMS hourly average output values as follows:

$$\text{Opacity, average for each hour} = \frac{(\text{Actual PM CEMS Output, average for each hour})(\text{Z, Opacity})}{(\text{Y, mg/m}^3)}$$

where:

Y = The average PM CEMS output value (mg/m^3) established during the initial PM CEMS PS-11 certification procedure at or near, but no greater than, the AAO limit. A concurrent Method 9 test shall be conducted during the PM CEMS measurements to determine opacity. At least 60 minutes of PM CEMS and Method 9 data shall be averaged.

Z = The average concurrent Method 9 opacity readings obtained during the initial PM CEMS PS-11 certification procedure corresponding to the PM CEMS measurements for Y above. The ratio of Z/Y has been determined from the initial CEMS certification testing to be 0.38 % opacity/mg/m^3 for Unit 1and 0.40 % opacity/mg/m^3 for Unit 2.

d. **For periods of less than 365 days of operation using either option under Section 2.1.A.3.a.i [COMS] or Section 2.1.A.3.a.ii [PM CEMS],** the AAO shall be calculated as follows:

$$AAO = \frac{\sum_{i=1}^{Z}(\text{6 minute COMS block i}) + \left(\sum_{j=1}^{Y}(\text{1 hour PM CEMS block j})(\text{10 six} - \text{minute blocks/1 hour block})\right)}{Z + 10Y}$$

where: Z = number of six-minute COM blocks of data within 365 day look-back period.
Y = number of one-hour PM CEMS blocks of data within 365 day look-back period.

Notes: The 1 hour PM CEMS block in the AAO equation above is its equivalent 1 hour block opacity as determined from the opacity equation in Section 2.1.A.5.c above. Variables Y and Z have different meanings in the two equations as defined above.

Alternatively, the Permittee may calculate the AAO using valid certified 1 hour PM CEMS blocks of data for the entire 365 day look-back period in the above equation for both the period when using PM CEMS for compliance with the AAO standard (after the 30 day notification) and for the period when using COMS for compliance with the AAO standard (instead of 6 minute COMS blocks).

Reporting [15A NCAC 02D .0536]

e. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** the Permittee shall submit a report postmarked on or before the 30th day following the end of each month showing, for each day of the previous month, the calculated annual average opacity of each unit and the annual average opacity limit.

f. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** the Permittee shall submit a report showing the calculated annual average opacity of each unit and the annual average opacity limit for each day during the reporting period postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02D .0535: EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

a. All electric utility boiler units shall have a malfunction abatement plan approved by the Director as specified in 15A NCAC 02D .0535(d).

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

b. The Permittee shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs (written or electronic form) shall be subject to inspection by DAQ personnel upon request during business hours. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0535 if these records are not maintained.

7. 15A NCAC 02D .0606: SOURCES COVERED BY APPENDIX P OF 40 CFR PART 51 (SULFUR DIOXIDE MONITORING, CONTINUOUS OPACITY MONITORING, AND EXCESS

EMISSIONS)*

* Changes to Sections 2.1.A.7.b and d are listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for Sections 2.1.A.7.b and d shall become final on January 30, 2017. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 02Q .0515(f).

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

a. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** the Permittee shall use a continuous opacity monitoring system (COMS) to monitor and record opacity. Continuous emissions monitoring and recordkeeping of opacity shall be performed as described in Paragraphs 2 and 3.1.1 through 3.1.5 of Appendix P of 40 CFR Part 51. The monitoring systems shall meet the minimum specifications described in Paragraphs 3.3 through 3.8 of Appendix P of 40 CFR Part 51.

The quarterly excess emissions (EE) reports required under Appendix P of 40 CFR Part 51 shall be used as an indication of good operation and maintenance of the electrostatic precipitators. These sources shall be deemed to be properly operated and maintained if the percentage of time the opacity emissions, calculated on a 6-minute average, in excess of 40 percent (including startups, shutdowns, and malfunctions) does not exceed 3.0 percent of the total operating time for any given calendar quarter, adjusted for monitor downtime (MD) as calculated below. In addition, these sources shall be deemed to be properly operated and maintained if the %MD does not exceed 2.0 percent for any given calendar quarter as calculated below.

Calculations for %EE and %MD

Percent Excess Opacity Emission (%EE) Calculation:

$$\%EE = \frac{Total\ Excess\ Emission\ Time*}{Total\ Source\ Operating\ Time*** - Monitor\ Downtime} \ x100$$

Percent Monitor Downtime (%MD) Calculation for COMS:

$$\%MD = \frac{Total\ Monitor\ Downtime**}{Total\ Source\ Operating\ Time***} \ x\,100$$

* Total Excess Emission Time contains any 6-minute period greater than 40% opacity including startup, shutdown, and malfunction.

** Total Monitor Downtime includes Quality Assurance (QA) activities unless exempted by regulation or defined in an agency approved QA Manual. The amount of exempt QA Time will be reported in the quarterly report as such.

*** If a source operates less than 2200 hours during any quarter, the source may calculate the %EE and/or %MD using all operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained. [N.C.G.S. 143-215.110]

b. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** the alternative monitoring and recordkeeping procedure in this section (Section 2.1.A.7.b) applies as allowed by Paragraph 3.9 of Appendix P of 40 CFR Part 51. The Permittee shall install, certify, operate, and maintain a PM CEMS to monitor and record PM emissions according to the applicable Maximum Achievable Control Technology (MACT) standards in §63.10010(i) of 40 CFR Part 63 Subpart UUUUU, as specified in Section 2.1.A.11.bb.

The quarterly excess emissions (EE) reports shall be used as an indication of good operation and maintenance of the electrostatic precipitators. These sources shall be deemed to be properly operated and maintained if the percentage of time the PM emissions, calculated on a one-hour average, greater than 0.030 pounds per million Btu heat input* does not exceed 3.0 percent of the total operating time for any given calendar quarter, adjusted for monitor downtime (MD) as calculated in Section 2.1.A.7.a above, except that Total Excess Emission Time contains all one-hour periods greater than 0.030 pounds per million Btu heat input*. In addition, these sources shall be deemed to be properly operated and maintained if the %MD does not exceed 2 percent for any given calendar quarter as calculated in Section 2.1.A.7.a above.

* The PM monitored value subject to the 0.030 pounds per million Btu limit shall have a 5% CO_2 diluent cap, or a 14% O_2 diluent cap, substituted in the emission rate calculation for a startup or shutdown hour in which the measured CO_2 concentration is below 5% or whenever the measured O_2 concentration is above 14%.

c. The Permittee shall use a continuous emissions monitoring system (CEMS) to monitor and record sulfur dioxide emissions. Continuous emissions monitoring and recordkeeping of sulfur dioxide emissions shall be performed as described in Paragraphs 2 and 3.1.1 through 3.1.5 of Appendix P of 40 CFR Part 51. The monitoring systems shall meet the minimum specifications described in Paragraphs 3.3 through 3.8 of Appendix P of 40 CFR Part 51. If the emission unit is also subject to 40 CFR Part 75, then facility may follow the Quality Assurance and Quality Control (QA/QC) procedures in Appendix B to Part 75 in lieu of the 40 CFR Part 51 QA/QC procedures.

The quarterly excess emissions (EE) reports required under Appendix P of 40 CFR Part 51 shall be used as an indication of good operation and maintenance of the flue gas desulfurization scrubbers. These sources shall be deemed to be properly operated and maintained if sulfur dioxide emissions do not exceed 1.02 pounds per million Btu calculated on a 24-hour basis. Compliance with the sulfur dioxide emission standard is determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are summed, and the sum is divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75. If a continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75, the minimum number of data points is determined by 40 CFR Part 75.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0606 if each source is not properly operated and maintained.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit the excess emissions and monitor downtime reports as required under Appendix P of 40 CFR Part 51 postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September as shown below. Reporting shall be in accordance with Paragraphs 4 and 5.1 of Appendix P of 40 CFR Part 51.
   i. **For periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used,** periods of excess emissions are defined as each six-minute period average greater than 40 percent opacity, the opacity measurements recorded by the COMS shall be reported as described in Paragraphs 4 and 5.1 of Appendix P of 40 CFR Part 51 except that a six-minute time period shall be deemed as an appropriate alternative opacity averaging period as described in Paragraph 4.2 of Appendix P of 40 CFR Part 51. A minimum of 36 data points, equally spaced, is required to determine a valid six-minute value.
   ii. **For periods when the compliance option under Section 2.1.A.3.a.ii [PM CEMS] is used,** excess

PM emissions are defined as any one-hour average greater than 0.030 pounds per million Btu heat input. The quarterly report shall include the number of hours each day and the percent of operating hours during the quarter with average PM emissions recorded by the PM CEMS greater than 0.030 pounds per million Btu including the application of any applicable diluent caps during a startup or shutdown hour.

iii. For sulfur dioxide, excess emissions are defined as greater than 1.02 pounds per million Btu calculated on a 24-hour block average basis.

iv. All instances of deviations from the requirements of this permit must be clearly identified

State-Enforceable Only

8. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Sources	Toxic Air Pollutants	Emission Limits
Electric utility boilers **(ID Nos. ES-1 (U1Boiler) and ES-2 (U2Boiler))**	Ammonia	121.5 pounds per hour each unit for a total of 243 pounds per hour

b. To ensure compliance with the above limits, the maximum anhydrous ammonia flue gas injection rate shall not exceed 121.5 pounds per hour, each, for Unit No. 1 and Unit No. 2.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .1106]

c. No monitoring/recordkeeping/reporting for ammonia emissions from the boilers is required to show compliance with 15A NCAC 02D .1100

Federal-Enforceable Only

9. Cross State Air Pollution Rule Requirements
(40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC)

For the two boilers **(ID Nos. ES-1 and ES-2)**, the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program", Subpart BBBBB "TR NOx Ozone Season Trading Program", and Subpart CCCCC "TR SO_2 Group 1 Trading Program".

10. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING[1]

a. In order to assure compliance with 15A NCAC 02D .0536, the two natural gas/coal-fired electric utility boilers (**Unit ID Nos. ES-1 and ES-2**) shall comply with all applicable requirements of 15A NCAC 02D .0614 "Compliance Assurance Monitoring".

b. The electrostatic precipitators shall be properly operated and maintained to control PM emissions from each boiler (**Unit ID Nos. ES-1 and ES-2**).

Monitoring/Record keeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall comply with the monitoring approach as included in the following Table:

1 Applies only during periods when the compliance option under Section 2.1.A.3.a.i [COMS] is used

A. Indicator Measurement Approach	Opacity Use of 40 CFR 75 certified COMS connected to a data logger
B. Indicator Range	An excursion is defined as an opacity value (based on a 3-hour block average) greater than: **ES-1 (Unit 1 Boiler) – 23 Percent** **ES-2 (Unit 2 Boiler) – 28 Percent** Excluding periods of startup, shutdown, off-line activities, malfunction, and maintenance (e.g. soot blowing). Excursions trigger an inspection of the control system and corrective action If five (5) percent or greater of COMS data (averaged over a three hour block period and excluding startup, shutdown, off-line activities, malfunction, and maintenance) recorded in a calendar quarter show opacity values higher than those listed above, a stack test shall be performed in the following calendar quarter to demonstrate compliance with the particulate standard in Section 2.1 A.4.a. If the stack test exceeds 80 percent of the PM limit, then retesting shall be conducted in accordance with 2.1 A.4.d. If a unit operates less than 2,200 hours during any calendar quarter, the Permittee may evaluate three-hour opacity values using operating data from the current and preceding quarters until 2,200 hours of data are obtained. If no changes are being made to the most recently approved protocol as submitted in the latest annual particulate test, it is not necessary for the Permittee to submit testing protocol 45 days prior to the scheduled test date as specified in General Condition JJ. Instead, the Permittee shall notify the Winston Salem Regional Office by email, fax, or letter, within fifteen (15) business days of making the determination that stack testing is required. The most recently approved protocol and the anticipated date of testing shall be included with that communication. The facility shall conduct testing no less than fifteen calendar (15) days from the date of this notification.
C. Performance Criteria	
1. Data Representativeness	The COMS location meets the specifications of 40 CFR Part 75 and 40 CFR 60, Appendix B.
2. Verification of Operational Status	Not applicable, use of monitoring equipment is proposed.
3. QA/QC Practices and Criteria	COMS are self-calibrated every 24 hours. Performance evaluations and calibration checks are carried out per 40 CFR 60, Appendix F. Documentation of performance evaluations, calibration checks, and maintenance logs are kept for a minimum of 5 years.
4. Monitoring Frequency	Continuous
5. Data Averaging Period	3-hour block average of 6-minute averages starting at midnight each day. (Total of eight 3-hour block periods)
6. Data Collection	Automated data acquisition system (DAHS). Real-time opacity values will be displayed to control room operators and alarms will be given to the operators when limits are exceeded.

d. For any excursion, the Permittee shall initiate an inspection of the control equipment and/or the COMS and initiate the necessary repairs as identified by the Malfunction Abatement Plan (MAP). In addition to implementing procedures outlined in the MAP, as required in Section 2.1 A.6.a, the following corrective actions shall be taken as soon as practical:
   i. Identify cause of excursion.
   ii. Initiate actions to correct the cause of any excursions identified in step i above. Repair equipment that is not operating properly. Isolate ESP fields if necessary in accordance with MAP.
   iii. Initiate work order for ESP inspection and repair as needed for any equipment that cannot be repaired during operation.
   iv. Document nature and cause of excursions in operations log.
   v. Improve preventative maintenance procedures as necessary in accordance with CAM QIP (if one exists) and MAP procedures.
   vi. Provide notification to DAQ in accordance with reporting requirements in Section 2.1 A.10.f below.

   If the above monitoring and recordkeeping is not performed, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614.

Reporting [15A NCAC 02Q .0508(f)]

e. The results of any stack test shall be reported within 30 days, and the test report shall be submitted within 60 days after the test.
f. The Permittee shall submit the quarterly reports as required under 15A NCAC 02D .0614 no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. The following information shall be included:
   i. The date, time, and duration of each excursion
   ii. Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken
   iii. The percent of operating time the PSEU has excursions
   iv. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable)

   All instances of deviations from the requirements of this permit must be clearly identified.

11. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART UUUUU)

a. The Permittee shall comply with all applicable provisions, including the requirements for emission limitations, work practice standards, operating limits, testing and initial compliance, continuous compliance, monitoring, recordkeeping, notification, and reporting, contained in Environmental Management Commission Standard 15A NCAC 02D .1111 Maximum Achievable Control Technology (MACT) as promulgated in the most current version of 40 CFR Part 63 Subpart UUUUU, "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units" and Subpart A General Provisions.

Emission Limitations and Work Practice Standards [15A NCAC 02Q .0508(b)]

b. The Permittee shall:
   i. limit the emissions of filterable particulate matter (PM) to 3.0E-2 lb/MMBtu or 3.0E-1 lb/MWh; or limit the emissions of total non-Hg HAP metals to 5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh; or limit the emissions of individual HAP metals to:

Constituent	Allowable Level
Antimony (Sb)	8.0E-1 lb/TBtu or 8.0E-3 lb/GWh
Arsenic (As)	1.1E0 lb/TBtu or 2.0E-2 lb/GWh
Beryllium (Be)	2.0E-1 lb/TBtu or 2.0E-3 lb/GWh
Cadmium (Cd)	3.0E-1 lb/TBtu or 3.0E-3 lb/GWh
Chromium (Cr)	2.8E0 lb/TBtu or 3.0E-2 lb/GWh
Cobalt (Co)	8.0E-1 lb/TBtu or 8.0E-3 lb/GWh
Lead (Pb)	1.2E0 lb/TBtu or 2.0E-2 lb/GWh
Manganese (Mn)	4.0E0 lb/TBtu or 5.0E-2 lb/GWh
Nickel (Ni)	3.5E0 lb/TBtu or 4.0E-2 lb/GWh
Selenium (Se)	5.0E0 lb/TBtu or 6.0E-2 lb/GWh

ii. limit the emissions of hydrogen chloride (HCl) to 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh; or limit the emissions of sulfur dioxide (SO_2) to 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.
iii. limit the emissions of mercury (Hg) to 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.
[§63.9991(a)(1) and Table 2 to Subpart UUUUU]

c. During periods of startup of an EGU:
i. The Permittee has chosen to comply using the following work practice standards, by choosing to comply using paragraph (1) of the definition of "startup" in §63.10042, defined as follows.

> *Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup.*

The Permittee shall operate all continuous monitoring systems (CMS) during startup. For startup of a unit, clean fuels must be used as defined in §63.10042 for ignition. Once the unit converts to firing coal, the Permittee shall engage all of the applicable control technologies except the SCR. The Permittee shall start the SCR system appropriately to comply with relevant standards applicable during normal operation. The Permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in Subpart UUUUU. The Permittee shall keep records during startup periods. The Permittee shall provide reports concerning activities and startup periods, as specified in §63.10011(g) and §63.10021(h) and (i).
ii. If the Permittee chooses to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, the Permittee shall comply with the limit at all times; otherwise, the Permittee shall comply with the applicable emission limit at all times except for startup and shutdown periods.
iii. The Permittee shall collect monitoring data during startup periods, as specified in §63.10020(a) and (e). The Permittee shall keep records during startup periods, as provided in §§63.10032 and 63.10021(h). The Permittee shall provide reports concerning activities and startup periods, as specified

in §§63.10011(g), 63.10021(i), and 63.10031.
[§63.9991(a)(1) and Table 3 to Subpart UUUUU]

d. During periods of shutdown of an EGU:

> *Shutdown means the period in which cessation of operation of an EGU is initiated for any purpose. Shutdown begins when the EGU no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid oil, syngas, or solid oil-derived fuel is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates electricity or makes useful thermal energy (such as steam or heat) for industrial, commercial, heating, or cooling purposes, and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.*

i. The Permittee shall operate all CMS during shutdown. The Permittee shall also collect appropriate data, and shall calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. While firing coal during shutdown, the Permittee shall vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee shall operate the controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than Subpart UUUUU and that require operation of the control devices.
ii. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel shall be one or a combination of the clean fuels defined in §63.10042 and shall be used to the maximum extent possible taking into account considerations such as not compromising boiler or control device integrity.
iii. The Permittee shall comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time the Permittee shall meet the work practice standards. The Permittee shall collect monitoring data during shutdown periods, as specified in §63.10020(a). The Permittee shall keep records during shutdown periods, as provided in §§63.10032 and 63.10021(h). The Permittee shall provide reports concerning activities and shutdown periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031.

[§63.9991(a)(1), §63.10042, and Table 3 to Subpart UUUUU]

General Compliance Requirements [15A NCAC 02Q .0508(f)]

e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 9 to Subpart UUUUU. [§63.10040]
f. The Permittee shall be in compliance with the emission limits and operating limits in Subpart UUUUU. These limits shall apply at all times except during periods of startup and shutdown; however, for coal-fired EGUs, the Permittee shall be required to meet the work practice requirements in Table 3 to Subpart UUUUU during periods of startup or shutdown. [§63.10000(a)]
g. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.10000(b)]
h. For coal-fired units, initial performance testing is required for all pollutants for the affected EGUs to demonstrate compliance with the applicable emission limits. [§63.10000(c)(1)]
i. The Permittee shall demonstrate compliance with the filterable particulate matter (PM) emission limit through an initial performance test and shall monitor continuous performance through use of a PM continuous emissions monitoring system (PM CEMS). [§63.10000(c)(1)(iv)]

j. The Permittee may demonstrate initial and continuous compliance by installing and operating a sulfur dioxide (SO_2) CEMS installed and operated in accordance with 40 CFR Part 75 to demonstrate compliance with the applicable SO_2 emissions limit. [§63.10000(c)(1)(v)]
k. The Permittee shall demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system in accordance with Appendix A to the Subpart. [§63.10000(c)(1)(vi)]
l. As part of demonstration of continuous compliance, the Permittee shall perform periodic tune-ups of the affected EGUs, according to §63.10021(e). [§63.10000(e)]
m. The Permittee shall install, certify, operate, maintain, and quality-assure each monitoring system necessary for demonstrating compliance with the work practice standards for PM during startup periods and shutdown periods. The Permittee shall collect, record, report, and maintain data obtained from these monitoring systems during startup periods and shutdown periods. [§63.10000(l)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the general compliance requirements in Sections 2.1.A.11.e through m above are not met.

Continuous Compliance Requirements [15A NCAC 02Q .0508(f)]

n. The Permittee shall monitor and collect data according to §63.10020. [§63.10020(a)]
o. The Permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The Permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [§63.10020(b)]
p. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation from the monitoring requirements. [§63.10020(d)]
q The Permittee shall demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 2 and 3 to Subpart UUUUU that applies to the affected EGU, according to the monitoring specified in Table 7 to Subpart UUUUU and paragraphs (b) through (g) of §63.10021(a). [§63.10021(a)]
r. Except as otherwise provided in §63.10020(c), if the Permittee uses a CEMS to measure SO_2, PM, HCl, HF, or Hg emissions, or uses a sorbent trap monitoring system to measure Hg emissions, the Permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO_2, O_2, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. The Permittee shall use Equation 8 to Subpart UUUUU to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.

$$\text{Boiler operating day average} = \frac{\sum_{=1}^{n} Her_i}{n} \quad \text{(Eq. 8)}$$

Where:
Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30- (or, if applicable, 90-) boiler operating days.
[§63.10021(b)]

s. The Permittee shall conduct periodic performance tune-ups of the EGUs, as specified in paragraphs (e)(1) through (9) of §63.10021. For the first tune-up, the Permittee may perform the burner inspection any time prior to the tune-up or delay the first burner inspection until the next scheduled EGU outage provided the requirements of §63.10005 are met. Subsequently, the Permittee shall perform an inspection of the burner

at least once every 36 calendar months unless the EGU employs neural network combustion optimization during normal operations in which case an inspection of the burner and combustion controls shall be performed at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the tune-up work practice requirements shall be performed within 30 days after the re-start of the affected unit. [§63.10021(e)]

t. The Permittee shall follow the startup or shutdown requirements as given in Table 3 to the Subpart for each coal-fired EGU and comply with all applicable requirements in §63.10011(g). [§§63.10005(j), 63.10011(g) and §63.10021(h)]

u. The Permittee shall determine the fuel whose combustion produces the least uncontrolled emissions, taking safety considerations into account, *i.e.*, the cleanest fuel, either natural gas or distillate oil, that is available on site or accessible nearby for use during periods of startup or shutdown. The cleanest fuel, either natural gas or distillate oil, for use during periods of startup or shutdown determination may take safety considerations into account. [§§63.10011(f)(1) and (2)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the continuous compliance requirements in Sections 2.1.A.11.n through u above are not met.

Monitoring [15A NCAC 02Q .0508(f)]

v. For an affected unit that exhausts to the atmosphere through a single, dedicated stack, the Permittee shall either install the required CEMS and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere. [§63.10010(a)(1)]

w. If the Permittee uses an oxygen (O_2) or carbon dioxide (CO_2) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O_2 or CO_2 concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. The Permittee shall install, certify, maintain, and operate the CEMS according to 40 CFR Part 75. Use only quality-assured O_2 or CO_2 data in the emissions calculations; do not use Part 75 substitute data values. [§63.10010(b)]

x. If the Permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to Subpart UUUUU, the Permittee shall install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to 40 CFR Part 75. Use only unadjusted, quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations. [§63.10010(c)]

y If the Permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to Subpart UUUUU, the Permittee shall install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, for coal-fired units, the Permittee may use appropriate fuel-specific default moisture values from §75.11(b) to estimate the moisture content of the stack gas. If the Permittee installs and operates a moisture monitoring system, the Permittee shall not use substitute moisture data in the emissions calculations. [§63.10010(d)]

z The Permittee shall use an SO_2 CEMS and must install the monitor at the outlet of the EGU, downstream of all emission control devices, and must certify, operate, and maintain the CEMS according to 40 CFR Part 75 as specified in paragraphs (f)(1) through (4) of §63.10010. [§63.10010(f)]

aa. The Permittee shall use a Hg CEMS or a sorbent trap monitoring system, the Permittee shall install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with Appendix A to Subpart UUUUU and as specified in §63.10010(g). [§63.10010(g)]

bb. The Permittee shall install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as specified in paragraphs (i)(1) through (5) of §63.10010 (shown below). The compliance limit shall be expressed as a 30-boiler operating day rolling average of the applicable numerical emissions limit value in Table 2 to Subpart UUUUU. [§63.10010(i)]

i. Install and certify the PM CEMS according to the procedures and requirements in Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix B to 40 CFR Part 60, using Method 5 at Appendix A-3 to 40 CFR Part 60 and ensuring that the front half filter temperature shall be 160° ±14 °C (320° ±25 °F). The reportable measurement output from the PM CEMS must be expressed in units of the applicable emissions limit (e.g., lb/MMBtu, lb/MWh).

ii. Operate and maintain the PM CEMS according to the procedures and requirements in Procedure 2—Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix F to 40 CFR Part 60.
   (A) Conduct the relative response audit (RRA) for the PM CEMS at least once annually (once per 12 month period).
   (B) Conduct the relative correlation audit (RCA) for the PM CEMS at least once every 3 (calendar) years.

iii. Collect PM CEMS hourly average output data for all boiler operating hours except as indicated in §63.10010(i).

iv. Calculate the arithmetic 30-boiler operating day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler operating hours.

v. Collect data using the PM CEMS at all times the process unit is operating and at the intervals specified in §63.10010(a), except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities.
   (A) Use all the data collected during all boiler operating hours in assessing the compliance with the operating limit except:
      (I) Any data collected during periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities that temporarily interrupt the measurement of emissions (e.g., calibrations, certain audits). Report any monitoring system malfunctions or out of control periods in the annual deviation reports. Report any monitoring system quality assurance or quality control activities per the requirements of §63.10031(b);
      (II) Any data collected during periods when the monitoring system is out of control as specified in the site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods. Report any such periods in the annual deviation report;
      (III) Any data recorded during periods of startup or shutdown.
   (B) Record and make available upon request results of PM CEMS system performance audits, dates and duration of periods when the PM CEMS is out of control to completion of the corrective actions necessary to return the PM CEMS to operation consistent with the site-specific monitoring plan.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the monitoring requirements in Sections 2.1.A.11.v through bb above are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

cc. The Permittee shall keep records of the following:
   i. Records required under appendix A and/or appendix B to Subpart UUUUU for continuous monitoring of Hg emissions.
   ii. Each notification and report that is submitted to comply with Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that was submitted, according to the requirements in §63.10(b)(2)(xiv).
   iii. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii). [§63.10032(a)]

dd. For each CEMS, the Permittee shall keep records as follows:
    i. Records described in §63.10(b)(2)(vi) through (xi).
    ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
    iii. Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).
    iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [§63.10032(b)]

ee. For each EGU subject to an emission limit, the Permittee shall keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [§63.10032(d)(1)]

ff If the Permittee chooses to rely on paragraph (1) of the definition of "startup" in §63.10042 for any EGU, records must be kept of the occurrence and duration of each startup or shutdown. [§63.10032(f)(1)]

gg. The Permittee shall keep records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.10032(g)]

hh. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.10032(h)]

ii. The Permittee shall keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [§63.10032(i)]

jj. The Permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records off site for the remaining 3 years. [§63.10033(a) through (c)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the recordkeeping requirements in Sections 2.1.A.11.cc through jj above are not met.

Reporting [15A NCAC 02Q .0508(f)]

kk. The Permittee shall submit the reports required under §63.10031 and, if applicable, the reports required under appendices A and B to Subpart UUUUU. The electronic reports required by appendices A and B shall be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. CEMS data (except for PM CEMS and any approved alternative monitoring using a HAP metals CEMS) shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including PM CEMS data, HAP metals CEMS data, and CEMS performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031. [§63.10021(f)]

ll. The Permittee shall report each instance in which the Permittee did not meet an applicable emissions limit or operating limit in Tables 1 through 4 to 40 CFR 63 Subpart UUUUU or failed to conduct a required tune-up. These instances are deemed violations from the requirements of 40 CFR 63 Subpart UUUUU and shall be reported according to §63.10031. [§63.10021(g)]

mm. The Permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h), as applicable, by the dates specified, or according to an agreed upon schedule by NCDAQ [§63.9(i)(2)]. [§63.10030(a)]

nn. When the Permittee is required to conduct a performance test, the Permittee shall submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [§63.10030(d)]

oo. The Permittee shall submit each report in Table 8 to 40 CFR 63 Subpart UUUUU, as applicable. If the Permittee is required to (or elect to) continuously monitor Hg and/or HCl and/or HF emissions, the Permittee shall also submit the electronic reports required under appendix A and/or appendix B to the Subpart, at the specified frequency. [§63.10031(a)]

pp. The Permittee shall submit each report in Table 8 to 40 CFR 63 Subpart UUUUU, as applicable postmarked

on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. [§63.10031(b)]

qq. The compliance report shall contain the following:
   i. The information required by the summary report located in 63.10(e)(3)(vi).
   ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
   iii. The report shall indicate whether the Permittee burned new types of fuel during the reporting period. If the Permittee did burn new types of fuel the Permittee must include the date of the performance test where that fuel was in use.
   iv. The report shall include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in §63.10021(e)(6) and (7) were completed.
   v. A certification.
   vi. If there is a deviation from any emission limit, work practice standard, or operating limit, the Permittee shall submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation.
   vii. For each excess emissions occurring at an affected source where the Permittee is using a CMS to comply with that emission limit or operating limit, the Permittee shall include the information required in §63.10(e)(3)(v) in the compliance report specified in §63.10031(c). [§63.10031(c) and §63.10031(d)]

rr. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 or Part 71 shall report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 of Subpart UUUUU along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.10031(e)]

ss. On or after July 1, 2018, within 60 days after the date of completing each performance test, the Permittee shall submit the performance test reports required by the Subpart to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). The Permittee shall comply with all applicable requirements in §63.10031(f). [§63.10031(f)]

tt. If the Permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. [§63.10031(g)]

12. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including emission limits, notification, testing, reporting, recordkeeping, and monitoring requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The following Best Available Control Technology (BACT) limits shall not be exceeded:

POLLUTANT	BACT EMISSION LIMIT	CONTROL TECHNOLOGY
CO	0.08 lb/million Btu (6-hour average), all operations except startups and shutdowns	Good combustion practices
	Work practice standards during startups and shutdowns See Section 2.1.A.12.b.i. through iii	Work practice standards
VOCs	0.0055 lb/million Btu (6-hour average), all operations except startups and shutdowns	Good combustion practices
	Work practice standards during start-ups and shut-downs See Section 2.1.A.12.b.i. through iii	Work Practice Standards

i. For startup of a unit, the Permittee shall use clean fuels as defined in Section 2.1.A.12.b.iii below for ignition. When firing coal, the Permittee shall utilize all of the applicable control technologies except dry scrubber and SCR. The Permittee shall start dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation.
ii. While firing coal during shutdown, the Permittee shall vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. If, in addition to the fuel used prior to initiation of shutdown, another fuel shall be used to support the shutdown process, that additional fuel shall be one or a combination of the clean fuels defined in Section 2.1.A.12.b.iii below and shall be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.
iii. Clean fuel means natural gas, synthetic natural gas that meets the specification necessary for that gas to be transported on a Federal Energy Regulatory Commission (FERC) regulated pipeline, propane, distillate oil, synthesis gas that has been processed through a gas clean-up train such that it could be used in a system's combustion turbine, or ultra-low-sulfur diesel (ULSD) oil, including those fuels meeting the requirements of 40 CFR part 80, subpart I ("Subpart I-Motor Vehicle Diesel Fuel; Nonroad, Locomotive, and Marine Diesel Fuel; and ECA Marine Fuel").

Testing [15A NCAC 02Q .0308(a)(1)]

c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the BACT emission limits for Units 1 and 2 (ID Nos. ES-1 and ES-2) when burning (i) natural gas only and (ii) natural gas and coal co-firing, by conducting annual performance tests at greater than 90% of maximum rated heat input, utilizing EPA reference methods, as in effect on the date of permit issuance, contained in 40 CFR 60, Appendix A, AND in accordance with a testing protocol (using testing protocol submittal form) approved by the Division of Air Quality, as follows:

POLLUTANT	TEST METHOD
Carbon Monoxide	Method 10
Volatile Organic Compounds	Method 25A or Method 18

Use of any other test method for compliance purposes shall be approved in advance by the Division of Air Quality and must be based on a test protocol that documents the alternate method is at least as accurate as the reference method test listed above.

i. Test results shall be the average of 3 valid test runs.
ii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the commencement of natural gas burning in Units 1 and 2 (ID Nos. ES-1

and ES-2), the Permittee shall conduct the initial performance test(s) and submit a written report of the test(s) to the Regional Supervisor, Division of Air Quality. The Permittee shall conduct the subsequent annual performance tests (no more than 12 calendar months following the previous performance test) and submit the written reports to the Regional Supervisor, Division of Air Quality, within 60 days of completion of such annual performance tests.

iii. This permit may be revoked, with proper notice to the Permittee, or enforcement procedures initiated, if the results of the test(s) indicate that the facility does not meet applicable limitations.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

d. The Permittee shall perform periodic tune-ups on Units 1 and 2 (ID Nos. ES-1 and ES-2) in accordance with the MACT Subpart UUUUU requirements in Section 2.1.A.11.s and comply with the associated Subpart UUUUU recordkeeping and reporting.

13. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0530(u)]

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements, pursuant to Application 8500004.18A, for the natural gas co-firing project. The Permittee shall perform the following:
   i. The Permittee shall maintain records of annual emissions in tons per year, on a calendar year basis related to the hot gas path modifications, for five years following resumption of regular operations after the change is made.
   ii. The Permittee shall submit a report to the director within 60 days after the end of each calendar year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).
   iii. The Permittee shall make the information documented and maintained under this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
   iv. The reported actual emissions (post-construction emissions) for each of the five calendar years will be compared to the projected actual emissions (pre-construction projection) as included below:

Regulated NSR Pollutant	Projected Actual Emissions* (tons per year)	
	Unit 1 (ID No. ES-1)	Unit 2 (ID No. ES-2)
NOx (as NO_2)	3,435	3,104
PM (filterable)	205.7	154.1
PM_{10}	516.58	411.68
$PM_{2.5}$	447.27	362.35
SO_2	3,838.75	2,991.86
HF	15.7	12.9
Lead	0.0213	0.0299
Sulfuric Acid Mist	130	45.6
GHG as CO_{2e}	5,794,839	5,065,913

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the Permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.

B. Two natural gas-fired auxiliary boilers (ID Nos. ES-3 and ES-4)

The Permittee may operate these sources on oil under the provisions in Permit No. 01983T33 until the conversion to natural gas is complete.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.079 pound per million Btu heat input	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	40 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	Best Combustion Practices See Section 2.1.B.4.	15A NCAC 02D .1109 (Case-By-Case MACT)
Hazardous Air Pollutants	See Section 2.1.B.5.	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)
Carbon Monoxide VOCs	See Section 2.1.B.6	15A NCAC 02D .0530
Various	See Section 2.1.B.7	15A NCAC 02D .0530(u)
-	See Section 2.2.E.1	15A NCAC 02Q .0504

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources **(ID Nos. ES-3 and ES-4)** into the atmosphere shall not exceed 0.079 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for emissions of particulate matter from the firing of natural gas in these sources **(ID Nos. ES-3 and ES-4)** to demonstrate compliance with 15A NCAC 02D .0503.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in

noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 40 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 90 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources.

4. 15A NCAC 02D .1109: 112(j) CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. The Permittee shall use best combustion practices when operating the affected boilers **(ID Nos. ES-3 and ES-4)**.
   i. The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements was February 7, 2014.
   ii. The Permittee shall comply with this CAA §112(j) standard until May 19, 2019. The initial compliance date for the applicable CAA §112(d) standard for "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" is May 20, 2019.

Monitoring [15A NCAC 02Q .0508(f)]

b. To ensure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
   i. Inspect the burner, and clean or replace any components of the burner as necessary;
   ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
   iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

c. The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with the requirement in Section 2.1 B.4.b., above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected boilers are not inspected and maintained as required above.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the

following:
i. The date of each recorded action;
ii. The results of each inspection; and,
iii. The results of any maintenance performed on the boilers.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART DDDDD)*

*** This section is not shielded pursuant to 15A NCAC 2Q .0512(a)**

After the Compliance Date specified below, the Permittee may operate these sources under the Subpart DDDDD limited-use boiler provisions in Permit No. 01983T33 until startup on natural gas, upon which time the Permittee shall comply with the following requirements.

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

a. For existing sources without a continuous oxygen trim system and with a heat input capacity 10 million Btu per hour or greater in the *Unit designed to burn gas 1 subcategory*, the Permittee shall, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" [Subpart DDDDD] and Subpart A "General Provisions".
   i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1. B.4. through May 19, 2019.
   ii. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

Definitions and Nomenclature [§63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [§63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to Subpart DDDDD.

Compliance Date [§63.7510(e), §63.56(b)]

d. The Permittee shall complete the initial tune up (see Sections 2.1 B.5.h through j) no later than May 20, 2019.

General Compliance Requirements [§63.7505(a), §63.7500(a)(3)]

e. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.1 B.5.f, except during periods of startup and shutdown. [§63.7500(a)(3)]
f. At all times, the Permittee shall operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether

such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Testing [15A NCAC 02Q .0508(f)]

g. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Work Practice Standards [15A NCAC 02Q .0508(f)]

h. The Permittee shall conduct an annual tune-up of the sources as specified below. The Permittee shall conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months.;
   ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
   iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
   iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
   v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

   [§63.7540(a)(10)]

i. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [§63.7515(d)]

j. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. The energy assessment shall be completed no later than the compliance date. [§63.7500(a)(1), Table 3]

Recordkeeping Requirements [15A NCAC 02Q .0508(f), §63.7555]

l. The Permittee shall:
   i. Keep a copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status, or compliance report that has been submitted. [§63.7555(a)(1), §63.10(b)(2)(xiv)]
   ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
      A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
      B. A description of any corrective actions taken as a part of the tune-up; and

C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[§63.7540(a)(10)(vi)]

m. The Permittee shall:
   i. Maintain records in a form suitable and readily available for expeditious review;
   ii. Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
   iii. Keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

   [§63.7560, §63.10(b)(1)]

Reporting Requirements [15A NCAC 02Q .0508(f), §63.7550(b)]

n. The Permittee shall submit an annual compliance report to the DAQ.
   i. The first compliance report shall be postmarked on or before January 30, 2021 and cover the period from May 20, 2019 through December 31, 2019.
   ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in §63.7550(h).

o. The compliance report shall contain:
   i. The information in §63.7550(c) as applicable.
   ii. For each deviation from an emission limit or operating limit, the report shall contain the information in§§63.7550(d) and (e) as applicable.

6. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including emission limits, notification, testing, reporting, recordkeeping, and monitoring requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The following Best Available Control Technology (BACT) limits shall not be exceeded:

POLLUTANT	BACT EMISSION LIMIT	CONTROL TECHNOLOGY
CO	0.08 lb/million Btu (6-hour average), all operations except startups and shutdowns	Good combustion practices and the use of pipeline quality natural gas
VOCs	0.0055 lb/million Btu (6-hour average), all operations except start-ups and shut-downs	

Testing [15A NCAC 02Q .0308(a)(1)]

c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the BACT emission limits for the auxiliary boilers (ID Nos. ES-3 and ES-4) by conducting an initial one time performance test at the maximum achievable heat input, utilizing EPA reference methods, as in effect on the date of permit issuance, contained in 40 CFR 60, Appendix A, AND in accordance with a testing protocol (using testing protocol submittal form) approved by the Division of Air Quality, as follows:

POLLUTANT	TEST METHOD
Carbon Monoxide	Method 10
Volatile Organic Compounds	Method 25A or Method 18

Use of any other test method for compliance purposes shall be approved in advance by the Division of Air Quality, and must be based on a test protocol that documents the alternate method is at least as accurate as the reference method test listed above.

i. Test results shall be the average of 3 valid test runs.
ii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the commencement of natural gas burning in the auxiliary boilers (ID Nos. ES-3 and ES-4), the Permittee shall conduct the initial performance test(s) and submit a written report of the test(s) to the Regional Supervisor, Division of Air Quality.
iii. This permit may be revoked, with proper notice to the Permittee, or enforcement procedures initiated, if the results of the test(s) indicate that the facility does not meet applicable limitations.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

d. The Permittee shall perform periodic tune-ups on the auxiliary boilers (ID Nos. ES-3 and ES-4) in accordance with the MACT Subpart DDDDD requirements in Section 2.1.B.5.h through j and comply with the associated Subpart DDDDD recordkeeping and reporting.

7. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0530(u)]

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements, pursuant to Application 8500004.18A, for the natural gas co-firing project. The Permittee shall perform the following:
   i. The Permittee shall maintain records of annual emissions in tons per year, on a calendar year basis related to the hot gas path modifications, for five years following resumption of regular operations after the change is made.
   ii. The Permittee shall submit a report to the director within 60 days after the end of each calendar year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).
   iii. The Permittee shall make the information documented and maintained under this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
   iv. The reported actual emissions (post-construction emissions) for each of the five calendar years will be compared to the projected actual emissions (pre-construction projection) as included below:

Regulated NSR Pollutant	Projected Actual Emissions* (tons per year)	
	Aux Boiler 1 (ID No. ES-3)	Aux Boiler 2 (ID No. ES-4)
NOx (as NO_2)	5.15	5.74
PM (filterable)	4.80E-02	5.35E-02
PM_{10}	1.31E-02	1.46E-02
$PM_{2.5}$	1.09E-02	1.21E-02
SO_2	1.52E-02	1.69E-02
HF	ND	ND
Lead	1.26E-05	1.41E-05
Sulfuric Acid Mist	ND	ND
GHG as CO_{2e}	3,011	3,356

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the Permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.

C. One No. 2 fuel oil-fired emergency/blackout protection diesel generator (ID No. ES-4a (EmGen))

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	None See Section 2.2 C	15A NCAC 02D .1111 40 CFR Part 63, Subpart ZZZZ

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source **(ID No. ES-4a(EmGen))** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source **(ID No. ES-4a(EmGen))**.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source (**ID No. ES-4a(EmGen))** shall not be more than 20 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, the Permittee shall perform a Method 9 test for 1 hour using a pre-approved protocol to be submitted in accordance with General Condition JJ before the sources operate more than 1,100 hours using No. 2 fuel oil. This monitoring protocol shall be repeated before each subsequent 1,100 hours of operation using No. 2 fuel oil from the last test for each source. If the results of any Method 9 test is above the limit in Section 2.1 C.2.a above, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall keep records of the hours and associated dates when these sources are in operation using No. 2 fuel oil, and the dates of performance of Method 9 tests. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any Method 9 test postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. No report is required if a Method 9 test was not performed during the reporting period.

D. Limestone Unloading, Transfer, and Processing Equipment:

- **The following sources:**
  - **Limestone rail unloading station (ID No. ES-6 (RUL)),**
  - **two limestone rail unloading hoppers (ID No. ES-6a (RULa) and ES-6b (RULb)),**
  - **72 inches wide limestone rail unloading belt feeder (ID No. ES-7 (LUBF))**

  Each with shared pulse jet bagfilter (ID No. CD (RULBf))

- **The following sources:**
  - **48 inches wide limestone unloading conveyor (ID No. ES-8 (LCB1)),**
  - **48 inches wide limestone stack-out conveyor (ID No. ES-10 (LCB2)),**
  - **40 inches wide limestone reclaim grate feeder (ID No. ES-11a (LRGF)),**
  - **30 inches wide limestone reclaim conveyor (ID No. ES-11b (LCB3)),**
  - **30 inches wide limestone weigh feeder belt for silo 1 (ID No. ES-19 (LCB6)),**
  - **30 inches wide limestone weigh feeder belt for silo 2 (ID No. ES-20 (LCB7)),**
  - **limestone wet ball mill 1 (ID No. ES-21 (BM1)), and**
  - **limestone wet ball mill 2 (ID No. ES-22 (BM2))**

- **The following sources:**
  - **30 inches wide limestone plant feed conveyor (ID No. ES-13a (LCB3a)),**
  - **30 inches wide limestone silo fill conveyor 1 (ID No. ES-15 (SCB4)),**
  - **30 inches wide limestone silo fill conveyor 2 (ID No. ES-16 (SCB5)),**
  - **limestone storage silo 1 (ID No. ES-17 (LS1)), and**
  - **limestone storage silo 2 (ID No. ES-18 (LS2))**

  Each with shared pulse jet bagfilter (ID No. CD (LPTTBf))

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Affected emission sources: **ID Nos. ES-6(RUL), ES-6a(RULa), ES-6b(RULb), ES-7(LUBF), ES-13a(LCB3a), ES-15(SCB4), ES-16(SCB5), ES-17(LS1), and ES-18(LS2)** see Section 2.2 B	15A NCAC 02Q.0317(a) (PSD avoidance)
Particulate Matter	Affected emission sources: All listed above under Section 2.1 D. Ambient Air Quality Standards	15A NCAC 02D .0510
Visible Emissions	Affected emission sources: **ID Nos. ES-6(RUL) and ES-10(LCB2)** 20 percent opacity	15A NCAC 02D .0521
Particulate Matter From Stacks	Affected emission sources: **ID Nos. ES-6a (RULa), ES-6b (RULb), ES-7 (LUBF), ES-13a (LCB3a), ES-15 (SCB4), ES-16 (SCB5), ES-17 (LS1), and ES-18 (LS2)** 0.05 g/dscm (0.022 gr/dscf)	15A NCAC 02D .0524, NSPS Subpart OOO 40 CFR 60.672(a)(1)

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions From Stacks	Affected emission sources: **ID Nos. ES-6a (RULa), ES-6b (RULb), ES-7 (LUBF), ES-13a (LCB3a), ES-15 (SCB4), ES-16 (SCB5), ES-17 (LS1), and ES-18 (LS2)** 7 percent opacity	15A NCAC 02D .0524, NSPS Subpart OOO 40 CFR 60.672(a)(2)
Visible Emissions From Fugitive Sources (Other Than Crushers) Not Enclosed In A Building	Affected emission sources: Transfer point from ES-11a (LRGF) to ES-11b (LCB3) 10 percent opacity	15A NCAC 02D .0524, NSPS Subpart OOO 40 CFR 60.672(b)
Visible Emissions From Fugitive Sources (Other Than Crushers) Enclosed In A Building	Affected emission sources: Transfer point from ES-8(LCB1) to ES-10 inside limestone unloading transfer tower, transfer point from ES-11b(LCB3) to ES-13a(LCB3a) inside yard transfer tower, and ES-19(LCB6) and ES-20(LCB7) located inside the reagent preparation building No visible emissions from building except from a vent as defined in 40 CFR 60.671 (see Section 2.1 D.3.d for vent requirements) OR: 10 percent opacity from the individual emission sources	15A NCAC 02D .0524, NSPS Subpart OOO 40 CFR 60.672(e) OR: 40 CFR 60.672(b)
Visible Emissions From Crushers Enclosed In A Building	Affected emission sources: **ID Nos. ES-21(BM1) and ES-22(BM2)** located inside the reagent preparation building No visible emissions from building except from a vent as defined in 40 CFR 60.671 (see Section 2.1 D.3.d for vent requirements) OR: 15 percent opacity from the individual emission sources	15A NCAC 02D .0524, NSPS Subpart OOO 40 CFR 60.672(e) OR: 40 CFR 60.672(c)
Fugitive Non-Process Dust Emissions	Affected emission sources: All listed above under Section 2.1 D See Section 2.2 A	15A NCAC 02D .0540
Toxic Air Pollutants	See Section 2.2 D **State-only requirement**	15A NCAC 02D .1100

1. 15A NCAC 02D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

a. The Permittee shall not cause, allow, or permit any material in a sand, gravel, or crushed stone operation to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.
b. Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be regulated by Section 2.2 A.1.
c. The Permittee shall control process-generated emissions from conveyors, screens, and transfer points, such

that the applicable opacity standards in Section 2.1 D.2 and 2.1 D.3 are not exceeded.

Testing [15A NCAC 02Q .0508(f)]

d. If emissions tests are required, the testing shall be performed in accordance with the applicable permit limit. If the results of this test are above the applicable limit, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

e. The monitoring/recordkeeping/reporting required by Section 2.1 D.3(f), (g), (h), (i), and (j) for particulate matter is sufficient to ensure compliance with 15A NCAC 02D .0510. If the monitoring and recordkeeping requirements in Section 2.1 D.3(f), (g), (h), and (i) are not complied with, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0510.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the limestone rail unloading station **(ID No. ES-6(RUL))** and the limestone stack-out conveyor (**ID No. ES-10(LCB2)**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emissions from the limestone rail unloading station (**ID No. ES-6(RUL)**) and the limestone stack-out conveyor (**ID No. ES-10(LCB2)**) for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   (a) immediately shutdown the source and repair the malfunction,
   (b) be deemed to be in noncompliance with 15A NCAC 02D .0521, or
   (c) demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 for 30 minutes is below the limit given in Section 2.1 D.2.a above.

   If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar

year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60, SUBPART OOO)

a. The Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions that:
   i. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
   ii. Exhibit greater than 7 percent opacity.
   iii. Emission sources with stack emissions affected by these requirements include:
      (A) Railcar unloading enclosure dust collection system with fabric filter (**ID No. CD (RULBf)**) installed on: two limestone rail unloading hoppers (**ID No. ES-6a (RULa) and ES-6b (RULb)**) and a limestone rail unloading belt feeder (**ID No. ES-7 (LUBF)**);
      (B) Limestone plant dust collection system with fabric filter (**ID No. CD (LPTTBf)**) installed on: a limestone plant feed conveyor (**ID No. ES-13a (LCB3a)**), two limestone silo fill conveyors (**ID Nos. ES-15(SCB4) and ES-16(SCB5)**), and two limestone storage silos (**ID Nos. ES-17(LS1) and ES-18(LS2**)); and
      (C) Any vent as defined in 40 CFR 60.671 of any building enclosing any affected emission source.

b. The Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility, fugitive emissions that exhibit greater than 10 percent opacity. Where any transfer points on belt conveyors or any other affected facility are enclosed inside a building, the Permittee may choose to comply with the emission standard requirements for building enclosures as defined below under Section 2.1 D.3.d below instead.

c. On and after the date on which the performance test is completed, the Permittee shall not allow to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions that exhibit greater than 15 percent opacity. Affected sources include the two limestone wet ball mills (**ID Nos. ES-21(BM1) and ES-22(BM2)**) located inside the reagent preparation building. Since the affected sources are enclosed inside a building, the Permittee may choose to comply to comply with the emission standard requirements for building enclosures as defined below under Section 2.1 D.3.d below instead.

d. In lieu of the meeting the requirements of Section 2.1 D.3.b and c. for NSPS-affected emissions sources enclosed inside a building, the Permittee may choose to comply with the following requirements:
   (A) No visible fugitive emissions are allowed from any building enclosing any transfer point on a conveyor belt or any other affected facility except emissions from a vent as defined in §60.671.
   (B) Any vent as defined in 40 CFR 60.671 on any building enclosing any transfer point on a conveyor belt or any other affected facility shall not discharge emissions of particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf) or visible emissions in excess of 7 percent opacity.
   (C) Affected buildings include the limestone unloading transfer tower which houses the transfer point between ES-8(LCB1) and ES-10(LCB2), the yard transfer tower which houses the transfer point between ES-11b(LCB3) and ES-13a(LCB3a), and the reagent preparation building which houses ES-19(LCB6), ES-20(LCB7), ES-21(BM1), and ES-22(BM2).

Testing [15A NCAC 02D .0508(f)]

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

f. Particulate matter emissions from sources (**ID Nos. ES-6a(RULa), ES-6b(RULb) and ES-7(LUBF)**) shall

be controlled by bagfilter (**ID No. CD (RULBf))**, and particulate matter emissions from sources **(ID Nos. ES-13a (LCB3a), ES-15 (SCB4), ES-16 (SCB5), ES-17 (LS1) and ES-18 (LS2)**) shall be controlled by bagfilter **(ID No. CD (LPTTBf)**). To ensure compliance, the Permittee shall perform inspections and maintenance on the fabric filters as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. A monthly visual inspection of the system ductwork and baghouse for leaks; and
ii. An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

g. To ensure compliance with the opacity standards, once a month the Permittee shall observe the individual NSPS-affected emission sources **(ID Nos. ES-6a(RULa), ES-6b(RULb), ES-7(LUBF), ES-8(LCB1), ES-11a(LRGF), ES-11b(LCB3), ES-13a(LCB3a), ES-15(SCB4), ES-16(SCB5), ES-17(LS1), ES-18(LS2), ES-19(LCB6), ES-20(LCB7), ES-21(BM1), and ES-22(BM2))** subject to an opacity standard, or the buildings/enclosures housing these sources, for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. immediately shutdown the source and repair the malfunction,
   ii. be deemed to be in noncompliance with 15A NCAC 02D .0521 or
   iii. demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 for 30 minutes is below the limit given in Section 2.1 D.3 (a)(ii), (b), and (c) above.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the ductwork and bagfilters are not inspected and maintained and/or if the demonstration in Paragraph 2.1 D.3.g.iii. cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

h. The results of all inspection and maintenance activities shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each inspection;
   iii. The results of any maintenance performed on the fabric filters, duct work, or baghouse; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

i. The results of the visible emission monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

j. The Permittee shall submit a summary report of the monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. No. 2 fuel oil fired emergency-use water pump (ID No. ES-23)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	None See Section 2.2 C.1.	15A NCAC 02D .1111 40 CFR Part 63, Subpart ZZZZ

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source **(ID No. ES-23)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source **(ID No. ES-23)**.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source (**ID No. ES-23)** shall not be more than 20 percent opacity (except during startup, shutdowns, and malfunctions) when averaged over a six-minute period except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, the Permittee shall perform a Method 9 test for 1 hour using a pre-approved protocol to be submitted in accordance with General Condition JJ before the source operates more than 1,100 hours using No. 2 fuel oil. This monitoring procedure shall be repeated before each subsequent 1,100 hours of operation using No. 2 fuel oil from the last test. If the results of this test are above the limit given in Section 2.1 E.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall keep records of hours and associated dates, when this source is in operation using No. 2 fuel oil, and the dates of performance of Method 9 tests. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any Method 9 test postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each

calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. No report is required if a Method 9 test was not performed during the reporting period.

F. Limestone stockpile (ID No. F1)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Fugitive non-process dust emissions	See Section 2.2 A	15A NCAC 02D .0540
Toxic Air Pollutants	See Section 2.2 D State-only requirement	15A NCAC 02D .1100

G. Lime storage silos (ID Nos. ES-33a (Silo,wwtf) and ES-33b(Silo,wwtf)) and associated pulse jet bagfilters (ID Nos. CD-wwtfBfa and CD-wwtfBfb)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Ambient Air Quality Standards	15A NCAC 02D .0510
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Fugitive Non-Process Dust Emissions	See Section 2.2 A	15A NCAC 02D .0540
Toxic Air Pollutants	See Section 2.2 D State-only requirement	15A NCAC 02D .1100

1. 15A NCAC 02D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

a. The Permittee shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.
b. Fugitive non-process dust emissions shall be controlled by 15A NCAC 02D .0540.
c. The Permittee shall control emissions from conveyors, screens, and transfer points, such that the applicable opacity standard are not exceeded.

Testing [15A NCAC 02Q .0508(f)]
d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 G.2 below, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510.

Monitoring [15A NCAC 02Q .0508(f)]
e. Particulate matter emissions from the emission sources (**ID Nos. ES-33a (Silo,wwtf) and ES-33b(Silo,wwtf)**) shall be controlled by the associated bagfilters (**ID Nos. CD-wwtfBfa and CD-wwtfBfb**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. A monthly visual inspection of the system ductwork and material collection unit for leaks; and
ii. An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

f. The Permittee shall comply with the requirements in Paragraph 2.1 G.2.c.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510 if the ductwork and bagfilters are not inspected and maintained and/or if the requirements in Paragraph 2.1 G.1.f are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

g. The results of inspection and maintenance in Section 2.1 G.1.e above shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
i. The date and time of each recorded action;
ii. The results of each inspection;
iii. The results of any maintenance performed on the bagfilters; and
iv. Any variance from manufacturer's recommendations, if any, and corrections made.

h. The Permittee shall keep records as required by Paragraph 2.1 G.2.d.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

i. The Permittee shall submit a summary report of the monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

j. The Permittee shall submit reports as required by Paragraph 2.1 G.2.e.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. ES-33a(Silo,wwtf) and ES-33b(Silo,wwtf))** shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 G.a., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points (**ID Nos. CD-wwtfBfa and CD-wwtfBfb**) of these sources for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
(a) immediately shutdown the source and repair the malfunction,
(b) be deemed to be in noncompliance with 15A NCAC 02D .0521 or,
(c) demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 for 30 minutes is below the limit given in Section 2.1 G.2.a above.

If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

H. Wastewater treatment facility (ID No. F3)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hydrogen Sulfide	10 tons per year	15A NCAC 02Q.0317(a)(1) (PSD avoidance)
	2.206 pounds per hour	15A NCAC 02D .1100

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITION (Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

a. In order to avoid applicability of 15A NCAC 02D .0530(g), emissions of hydrogen sulfide from the wastewater treatment facility (**ID No. F-3**) shall not exceed the PSD significance level of 10 tons per year as calculated by the following equation:

(24 kg/day hydrogen sulfide emission rate) x (365 days/yr) x (2.206 lb/kg) x (1 ton/2000 lb) = 9.66 tons/yr

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting of hydrogen sulfide emissions from the wastewater treatment facility is required to demonstrate compliance with 15A NCAC 02Q .0317.

State-Enforceable Requirement

2. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application[2] for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

2 Approved December 21, 2005.

Emission Source	Toxic Air Pollutant	Emission Limit
Wastewater Treatment Facility (**ID No. F-3**)	Hydrogen Sulfide	2.206 Pounds Per Hour

b. To ensure compliance with the above limits, the maximum sulfate concentration shall not exceed 4,000 milligrams per liter at the inlet to bioreactors of the wastewater treatment facility.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .1106]

c. No monitoring/recordkeeping/reporting for hydrogen sulfide emissions from the wastewater treatment facility is required to show compliance with 15A NCAC 02D .1100.

I. Unit 1 hydrated lime storage silo (ID No. ES-U1SorbSilo) with associated bagfilter (ID No. CD-U1SorbSiloBf)

Unit 2 hydrated lime storage silo (ID No. ES-U2SorbSilo) with associated bagfilter (ID No. CD-U2SorbSiloBf)

Unit 1 Weigh hopper 1 (ID No. ES-U1WHopper1) with associated bagfilter (ID No. CD-U1WH1Bf)

Unit 1 Weigh hopper 2 (ID No. ES-U1Whopper2) with associated bagfilter (ID No. CD-U1WH2Bf)

Unit 1 Weigh hopper 3 (ID No. ES-U1Whopper3) with associated bagfilter (ID No. CD-U1WH3Bf)

Unit 2 Weigh hopper 1 (ID No. ES-U2WHopper1) with associated bagfilter (ID No. CD-U2WH1Bf)

Unit 2 Weigh hopper 2 (ID No. ES-U2Whopper2) with associated bagfilter (ID No. CD-U2WH2Bf)

Unit 2 Weigh hopper 3 (ID No. ES-U2Whopper3) with associated bagfilter (ID No. CD-U2WH3Bf)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	**Limits/Standards**	**Applicable Regulation**
particulate matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons/hr, or $E = 55.0 \times P^{0.11} - 40$ for $P > 30$ tons/hr where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 D State-only requirement	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID No. ES-U1SorbSilo, ES-U2SorbSilo, ES-U1WHopper1, ES-U1Whopper2, ES-U1Whopper3, ES-U2WHopper1, ES-U2Whopper2, and ES-U2Whopper3)** shall not exceed an allowable emission rate as calculated by the following equation:

$$\mathbf{E = 4.10 \times P^{0.67}} \quad \text{for } \mathbf{P} \leq 30 \text{ tons/hr, or}$$
$$\mathbf{E = 55.0 \times P^{0.11} - 40} \quad \text{for } \mathbf{P} > 30 \text{ tons/hr}$$

where:
E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources shall be controlled by the bagfilters (**ID Nos. CD-U1SorbSiloBf, CD-U2SorbSiloBf, CD-U1WH1Bf, CD-U1WH2Bf, CD-U1WH3Bf, CD-U2WH1Bf, CD-U2WH2Bf, and CD-U2WH3Bf**). To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity; and
   ii. a monthly visual inspection of the system ductwork, and material collection unit for leaks.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of actions recorded;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-

month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID No. ES-U1SorbSilo, ES-U2SorbSilo, ES-U1WHopper1, ES-U1Whopper2, ES-U1Whopper3, ES-U2WHopper1, ES-U2Whopper2, and ES-U2Whopper3)** shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The Permittee shall establish "normal" for the source in the first 30 days following start-up of the sources. The monthly observations must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   (a) immediately shutdown the source and repair the malfunction,
   (b) be deemed to be in noncompliance with 15A NCAC 02D .0521 or
   (c) demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .0501(c)(8) for 30 minutes is below the limit given in Section 2.1 I.2.a above.

   If the demonstration in iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

J. Flyash handling sources:

Units 1 and 2 dry flyash transfer system (ID No. ES-TS-1) and associated bagfilter CD-BF-7)

Two flyash storage and handling silos (ID Nos. SILO-3 and SILO-5), with associated bagfilters (ID Nos. CD-BF-6 and BF-5)

One flyash storage and handling silo (ID No. SILO-4) and dry flyash truck loading station (ID No. DFAL-4a), each with associated bagfilter (ID No. BF-4)

One dry flyash truck loading station (ID No. DFAL-4b), with associated cartridge filter (ID No. CD-4b)

One wet flyash truck loading station (ID No. WFAL-3), with associated flyash conditioner injection (ID No. FAC-3)

One wet flyash truck loading station (ID No. WFAL-5), with associated flyash conditioner injection (ID No. FAC-5)

One flyash storage dome (ID No. DOME-1), with associated bagfilter (ID No. DBF-1)

CONDITIONS FOR THIS EQUIPMENT ARE NOT SHIELDED PURSUANT TO 15A NCAC 02Q .0512(a).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30$ $E = 55.0 \times P^{0.11} - 40$ for $P > 30$ where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 D	15A NCAC 02D .1100
Fugitive Non-Process Dust Emissions	See Section 2.2 A	15A NCAC 02D .0540

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. ES-TS-1, SILO-3, SILO-4, SILO-5, DFAL-4a, DFAL-4b, WFAL-3, WFAL-5, and DOME-1)** shall not exceed an allowable emission rate as calculated by the following equation:

$$\mathbf{E = 4.10 \times P^{0.67}} \quad \text{for } \mathbf{P} \leq 30$$
$$\mathbf{E = 55.0 \times P^{0.11} - 40} \quad \text{for } \mathbf{P} > 30$$

where:

E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources shall be controlled by the control devices as described above. To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an annual (for each 12-month period following the initial inspection) internal inspection of the cartridge/bagfilters' structural integrity; and
   ii. a monthly visual inspection of the system ductwork, and material collection unit for leaks.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of actions recorded;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the filters and injection systems; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the filters within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(ID Nos. ES-TS-1, SILO-3, SILO-4, SILO-5, DFAL-4a, DFAL-4b, WFAL-3, WFAL-5, and DOME-1)** shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The Permittee shall establish "normal" for these sources (ID Nos. ES-TS-1, SILO-3 and SILO-5) within 30 days of commencement of operation of new or modified equipment. The monthly observations must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee

shall either:
(a) immediately shutdown the source and repair the malfunction,
(b) be deemed to be in noncompliance with 15A NCAC 02D .0521 or
(c) demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .0501(c)(8) for 30 minutes is below the limit given in Section 2.1 J.2.a above.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements for a dry flyash handling project (ID Nos. SILO-3, SILO-4, SILO-5, DFAL-4a, DFAL-4b, WFAL-3, WFAL-5, and DOME-1).

The Permittee shall comply with the following record keeping and reporting requirements.

Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. The Permittee shall maintain records of annual emissions for particulates, PM_{10}, $PM_{2.5}$, and lead in tons per year on a calendar year basis related to the modification, for five years following the resumption of regular operations after completion of the dry flyash handling project.

The Permittee shall make the information, documented and maintained in this Section 2.1 J.3.b, available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

c. The Permittee shall submit a report to the Director within 60 days after the end of each calendar year during which the records in Section 2.1 J.3.b must be kept. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)*(a)* through *(c)*.

The reported actual emissions (post-construction emissions) for each of the five calendar years will be compared to the following projected actual emissions (pre-construction projection) as included in the Belews Creek Steam Station permit application 8500004.17A:

Pollutant	**Projected Actual Emissions* (tons per year)**
	ID Nos. SILO-3, SILO-4, SILO-5, DFAL-4a, DFAL-4b, WFAL-3, WFAL-5, and DOME-1 (total)
Particulate Matter	0.80
PM_{10}	0.27
$PM_{2.5}$	0.27
Lead	6.26E-05

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 2D .0530, the Permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.

4. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

a. For completion of the two-step significant modification process pursuant to 15A NCAC 02Q .0501(c)(2) or (d)(2), the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of any of these sources and air pollution control devices (ID Nos. ES-TS-1, CD-BF-7 and CD-BF-6).

K. Four natural gas-fired, natural gas supply line heaters (ID Nos. ES-34a, ES-34b, ES-34c and ES-34d)

CONDITIONS FOR THIS EQUIPMENT ARE NOT SHIELDED PURSUANT TO 15A NCAC 02Q .0512(a).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.079 pound per million Btu heat input	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	See Section 2.1.K.4	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)
Carbon Monoxide and VOCs	See Section 2.1.K.5	15A NCAC 02D .0530
-	See Section 2.2.E.1	15A NCAC 02Q .0504

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources **(ID Nos. ES-34a, ES-34b, ES-34c and ES-34d)** into the atmosphere shall not exceed 0.079 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for emissions of particulate matter from the firing of natural gas in these sources **(ID Nos. ES-34a, ES-34b, ES-34c and ES-34d)** to demonstrate compliance with 15A NCAC 02D .0503.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas from these sources.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART DDDDD)

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

a. For new sources without a continuous oxygen trim system and with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in the *Unit designed to burn gas 1 subcategory*, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" [Subpart DDDDD] and Subpart A "General Provisions".
   i. The Permittee shall comply with Subpart DDDDD upon startup. [63.7495(a)]

Definitions and Nomenclature [§63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [§63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to Subpart DDDDD.

Compliance Date [§63.7510(g), §63.56(b)]

d. The Permittee shall comply with this subpart upon startup of the process heaters.

General Compliance Requirements [§63.7505(a), §63.7500(a)(3)]

e At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.1.K.4.f, except during periods of startup and shutdown. [§63.7500(a)(3)]

f. At all times, the Permittee shall operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Testing [15A NCAC 02Q .0508(f)]

g. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Work Practice Standards [15A NCAC 02Q .0508(f)]

h. The Permittee shall conduct a biennial tune-up of the source(s) as specified below.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled unit shutdown;
   ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
   iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
   iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
   v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

   [§63.7540(a)(11), §63.7500(e)]

i. The Permittee shall demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable biennial schedule as specified in §63.7515(d) following the initial compliance date. Thereafter, the applicable biennial tune-up is required to be completed as specified in §63.7515(d). [§63.7510(g)]
j. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [§63.7515(d)]
k. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]

Recordkeeping Requirements [15A NCAC 02Q .0508(f), §63.7555]

l. The Permittee shall:
   i. Keep a copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status, or compliance report that has been submitted. [§63.7555(a)(1), §63.10(b)(2)(xiv)]
   ii. Maintain on-site and submit, if requested by the Administrator, a biennial report containing the information in paragraphs (A) through (C) below:
      A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
      B. A description of any corrective actions taken as a part of the tune-up; and
      C. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

      [§63.7540(a)(10)(vi)]

m. The Permittee shall:
   i. Maintain records in a form suitable and readily available for expeditious review;
   ii. Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
   iii. Keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

   [§63.7560, §63.10(b)(1)]

Reporting Requirements [15A NCAC 02Q .0508(f), §63.7550(b)]

n. The Permittee shall submit a biennial compliance report to the DAQ.
   i. The first compliance report shall be postmarked on or before January 30, 2021 and cover the period from May 20, 2019 through December 31, 2020.
   ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in §63.7550(h).

o. The compliance report shall contain:
   i. The information in §63.7550(c) as applicable.
   ii. For each deviation from an emission limit or operating limit, the report shall contain the information in§§63.7550(d) and (e) as applicable.

5. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including emission limits, notification, testing, reporting, recordkeeping, and monitoring requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The following Best Available Control Technology (BACT) limits shall not be exceeded:

POLLUTANT	BACT EMISSION LIMIT	CONTROL TECHNOLOGY
CO	0.0914 lb/million Btu (6-hour average), all operations except startups and shutdowns	Good combustion practices and the use of pipeline quality natural gas
VOCs	0.0644 lb/million Btu (6-hour average), all operations except start-ups and shut-downs	

Testing [15A NCAC 02Q .0308(a)(1)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

d. The Permittee shall perform periodic tune-ups on the natural gas supply line heaters (ID Nos. ES-34a, ES-34b, ES-34c and ES-34d) in accordance with the MACT Subpart DDDDD requirements in Section 2.1.B.5.h through j and comply with the associated Subpart DDDDD recordkeeping and reporting.

L. Natural gas supply line pigging operation including fugitive emissions from pig receiver vent (ID No. ES-PIGGING) with associated temporary flare of natural gas from supply line (ID No. CD-PIG FLARE)

CONDITIONS FOR THIS EQUIPMENT ARE NOT SHIELDED PURSUANT TO 15A NCAC 02Q .0512(a).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Carbon Monoxide and VOCs	work practices	15A NCAC 02D .0530
Toxic Air Pollutants	See Section 2.2.D.1	15A NCAC 02D .1100
-	See Section 2.2.E.1	15A NCAC 02Q .0504

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas from this source.

3. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including emission limits, notification, testing,

reporting, recordkeeping, and monitoring requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The following Best Available Control Technology (BACT) limits shall not be exceeded:

POLLUTANT	BACT EMISSION LIMIT	CONTROL TECHNOLOGY
CO	work practices	flare
VOCs	work practices	

Testing [15A NCAC 02Q .0308(a)(1)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping [15A NCAC 02Q .0308(a)(1)]

d. CO and VOC emissions from the natural gas supply line pigging operation (ID No. ES-PIGGING) shall be controlled as follows:

The flare (ID No. CD-PIG FLARE) shall be adequately sized and designed for combustion of the natural gas to be vented. Prior to each scheduled day for pigging, the flare will be inspected and maintained in accordance with the manufacturer's recommendations and a record of this activity maintained. A copy of the recommended inspection and maintenance procedure will be maintained on-site and any deviations from standard protocols due to site-specific considerations will be documented and maintained. The work practice standard for the receiver will be to keep access openings to the receiver closed at all times except when a pig is being placed into or removed from the receiver, or during active maintenance operations.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Limestone rail unloading station (ID No. ES-6 (RUL)), two limestone rail unloading hoppers (ID No. ES-6a (RULa) and ES-6b (RULb)), a 72 inches wide limestone rail unloading belt feeder (ID No. ES-7 (LUBF)), and associated pulse jet baghouse (ID No. CD (RULBf))

48 inches wide limestone unloading conveyor (ID No. ES-8(LCB1)), 48 inches wide limestone stack-out conveyor (ID No. ES-10(LCB2)), 40 inches wide limestone reclaim grate feeder (ID No. ES-11a(LRGF)), 30 inches wide limestone reclaim conveyor (ID No. ES-11b(LCB3)), 30 inches wide limestone weigh feeder belt for silo 1 (ID No. ES-19(LCB6)), 30 inches wide limestone weigh feeder belt for silo 2 (ID No. ES-20(LCB7)), limestone wet ball mill 1 (ID No. ES-21(BM1)), and limestone wet ball mill 2 (ID No. ES-22(BM2))

30 inches wide limestone plant feed conveyor (ID No. ES-13a (LCB3a)), 30 inches wide limestone silo fill conveyor 1 (ID No. ES-15 (SCB4)), 30 inches wide limestone silo fill conveyor 2 (ID No. ES-16 (SCB5)), limestone storage silo 1 (ID No. ES-17(LS1)), limestone storage silo 2 (ID No. ES-18 (LS2)), and associated pulse jet bagfilter (ID No. CD (LPTTBf))

One limestone stockpile (ID No. F1)

Lime storage silos (ID Nos. ES-33a (Silo,wwtf) and ES-33b(Silo,wwtf)) and associated pulse jet bagfilters (ID Nos. CD-wwtfBfa and CD-wwtfBfb)

Units 1 and 2 dry flyash transfer system (ID No. ES-TS-1) and associated bagfilter CD-BF-7)

Two flyash storage and handling silos (ID Nos. SILO-3 and SILO-5), with associated bagfilters (ID Nos. CD-BF-6 and BF-5)

One flyash storage and handling silo (ID No. SILO-4) and dry flyash truck loading station (ID No. DFAL-4a), each with associated bagfilter (ID No. BF-4)

One dry flyash truck loading station (ID No. DFAL-4b), with associated cartridge filter (ID No. CD-4b)

One wet flyash truck loading station (ID No. WFAL-3), with associated flyash conditioner injection (ID No. FAC-3)

One wet flyash truck loading station (ID No. WFAL-5), with associated flyash conditioner injection (ID No. FAC-5)

One flyash storage dome (ID No. DOME-1), with associated bagfilter (ID No. DBF-1)

CONDITIONS FOR THIS EQUIPMENT ARE NOT SHIELDED PURSUANT TO 15A NCAC 02Q .0512(a).

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Fugitive Non-Process Dust Emissions	Fugitive non-process dust emissions shall not cause or contribute to substantive complaints	15A NCAC 02D .0540

1. 15A NCAC 02D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES

a. For the purpose of this Rule the following definitions shall apply:
   i. "Fugitive non-process dust emission" means particulate matter that is not collected by a capture system and is generated from areas such as pit areas, process areas, haul roads, stockpiles, and plant roads.
   ii. "Substantive complaints" means complaints that are verified with physical evidence acceptable to the DAQ.
b. The Permittee shall not cause or allow fugitive non-process dust emissions to cause or contribute to substantive complaints.
c. If fugitive non-process dust emissions from a facility required complying with this Rule cause or contributing to substantive complaints, the Permittee shall:
   i. Within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written description of what has been done and what will be done to reduce fugitive non-process dust emissions from that part of the facility that caused the second substantive complaint;
   ii. Within 90 days of receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a control plan as described in Paragraph (e) of this Rule; and
   iii. Within 30 days after the Director approves the plan, be in compliance with the plan.
d. The Director may require that the Permittee develop and submit a fugitive non-process dust control plan as described in Paragraph (e) of this Rule if:
   i. Ambient air quality measurements or dispersion modeling acceptable to the DAQ show violation or a potential for a violation of an ambient air quality standard for particulates in 15A NCAC 02D .0400 "Ambient Air Quality Standards;" or
   ii. If the DAQ observes excessive fugitive non-process dust emissions from the facility beyond the property boundaries.

   The control plan shall be submitted to the Director no later than 90 days after notification. The facility shall be in compliance with the plan within 30 days after the Director approves the plan.
e. The fugitive dust control plan shall:
   i. Identify the sources of fugitive non-process dust emissions within the facility;
   ii. Describe how fugitive non-process dust will be controlled from each identified source;
   iii. Contain a schedule by which the plan will be implemented;
   iv. Describe how the plan will be implemented, including training of facility personnel; and
   v. Describe methods to verify compliance with the plan.
f. The Director shall approve the plan if:
   i. The plan contains all required elements in Paragraph (e) of this Rule;
   ii. The proposed schedule contained in the plan will reduce fugitive non-process dust emissions in a timely manner;
   iii. The methods used to control fugitive non-process dust emissions are sufficient to prevent fugitive non-process dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and
   iv. The described compliance verification methods are sufficient to verify compliance with the plan.

   If the Director finds that the proposed plan does not meet the requirements of this Paragraph he shall notify the Permittee of any deficiencies in the proposed plan. The Permittee shall have 30 days after receiving written notification from the Director to correct the deficiencies.
g. If, after a plan has been implemented, the Director finds that the plan inadequately controls fugitive non-process dust emissions, the Permittee shall be required to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the Permittee shall submit a revision to his plan to correct the deficiencies.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0540 if the fugitive dust plan is not submitted as required above and/or if the Permittee does not operate according to the approved fugitive dust plan.

B. Limestone rail unloading station (ID No. ES-6 (RUL)), two limestone rail unloading hoppers (ID No. ES-6a (RULa) and ES-6b (RULb)), a 72 inches wide limestone rail unloading belt feeder (ID No. ES-7 (LUBF)), and associated pulse jet baghouse (ID No. CD (RULBf))

30 inches wide limestone plant feed conveyor (ID No. ES-13a (LCB3a)), 30 inches wide limestone silo fill conveyor 1 (ID No. ES-15 (SCB4)), 30 inches wide limestone silo fill conveyor 2 (ID No. ES-16 (SCB5)), limestone storage silo 1 (ID No. ES-17 (LS1)), limestone storage silo 2 (ID No. ES-18 (LS2)), and associated pulse jet bagfilter (ID No. CD (LPTTBf))

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	As defined in specific condition	15A NCAC 02Q.0317 (PSD avoidance)

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITION (For 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

a. In order to avoid applicability of 15A NCAC 02D .0530(g):
   i. the limestone rail unloading system consisting of limestone rail unloading station (**ID No. ES-6(RUL)**), two limestone rail unloading hoppers (**ID No. ES-6a (RULa) and ES-6b(RULb)**), a 72 inches wide limestone rail unloading belt feeder (**ID No. ES-7(LUBF)**), and associated pulse jet baghouse (**ID No. CD(RULBf)**) shall:
      1. not operate more than 832 hours per consecutive 12-month period, and
      2. keep particulate emissions below 1.71 tons per year;
   ii. the 30 inches wide limestone plant feed conveyor (**ID No. ES-13a(LCB3a)**), 30 inches wide limestone silo fill conveyor 1 (**ID No. ES-15(SCB4)**), 30 inches wide limestone silo fill conveyor 2 (**ID No. ES-16(SCB5)**), limestone storage silo 1 (**ID No. ES-17(LS1)**), limestone storage silo 2 (**ID No. ES-18(LS2)**), and associated pulse jet bagfilter (**ID No. CD(LPTTBf)**) shall:
      1. not operate more than 2,555 hours per consecutive 12-month period, and
      2. keep particulate emissions below 1.85 tons per year
   iii. keep total particulate emissions from all sources added by Application No. 8500004.05B (received May 16, 2005) below the PSD significance level of 25 tons per year.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.2 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. The Permittee shall keep monthly records in a logbook (written or electronic format) of the number of hours of operation for these sources. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the number of hours of operation is not monitored and/or if the monitoring indicates an exceedance of the limits given in Section 2.2 B.1.a above.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly hours of operation for these sources for the previous 17 months. The emissions must be calculated for each of the 12-month periods

over the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

C. Emergency/blackout protection diesel generator (ID No. ES-4a (EmGen))

Emergency-use water pump (ID No. ES-23)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	None	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART ZZZZ)

According to 40 CFR 63.6590(b)(3)(iii), existing emergency-use engines located at a major source of HAPs with a brake horsepower rating greater than 500 do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

D. Facility wide toxics demonstration

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	Emissions rates modeled to demonstrate compliance with acceptable ambient levels. **State Only Requirement**	15A NCAC 02D .1100

State-Only Requirement

1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
ES-6 (RUL), ES-6a (RULa), ES-6b (RULb), ES-7 (LUBF) Common exhaust through bagfilter CD (RULBf) Model ID DUSTRAIN	Arsenic and inorganic arsenic compounds	2.70E-01	-	-
	Beryllium	2.15E-01	-	-
	Cadmium	2.66E-01	-	-
	Manganese and compounds	-	1.20E+01	-
	Mercury Vapor	-	3.68E-04	-
	Nickel Metal	-	3.12E-01	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
ES-8 (LCB1) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-10 (LCB2) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
F1 Limestone Stockpile, IES-74 Model ID LIMESTON	Arsenic and inorganic arsenic compounds	9.51E-01	-	-
	Beryllium	7.56E-01	-	-
	Cadmium	9.37E-01	-	-
	Manganese and compounds	-	4.22E+01	-
	Mercury Vapor	-	1.29E-03	-
	Nickel Metal	-	1.10E+00	-
ES-11a (LRGF) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-11b (LCB3) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-13a (LCB3a), ES-15 (SCB4), ES-16 (SCB5), ES-17 (LS1), ES-18 (LS2) Common exhaust point through bagfilter	Arsenic and inorganic arsenic compounds	1.57E-01	-	-
	Beryllium	1.25E-01	-	-
	Cadmium	1.55E-01	-	-
	Manganese and compounds	-	6.99E+00	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
CD (LPTTBf) Model ID DUSTLPTT	Mercury Vapor	-	2.14E-04	-
	Nickel Metal	-	1.82E-01	-
ES-19 (LCB6) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-20 (LCB7) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-21 (BM1) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-22 (BM2) Model ID LIMEDROP (8 drop points)	Arsenic and inorganic arsenic compounds	1.03E-01	-	-
	Beryllium	8.20E-02	-	-
	Cadmium	1.02E-01	-	-
	Manganese and compounds	-	4.58E+00	-
	Mercury Vapor	-	1.40E-04	-
	Nickel Metal	-	1.19E-01	-
ES-33a (Silo,wwtf) Model ID ES33a	Arsenic and inorganic arsenic compounds	7.27E-02	-	-
	Beryllium	5.78E-02	-	-
	Cadmium	7.16E-02	-	-
	Manganese and compounds	-	3.23E+00	-
	Mercury Vapor	-	9.89E-05	-
	Nickel Metal	-	8.40E-02	-
ES-33b(Silo,wwtf) Model ID ES33b	Arsenic and inorganic arsenic compounds	7.27E-02	-	-
	Beryllium	5.78E-02	-	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
	Cadmium	7.16E-02	-	-
	Manganese and compounds	-	3.23E+00	-
	Mercury Vapor	-	9.89E-05	-
	Nickel Metal	-	8.40E-02	-
ES-U1SorbSilo Model ID ESU1A	Arsenic and inorganic arsenic compounds	1.85E-01	-	-
	Beryllium	1.95E-01	-	-
	Cadmium	1.90E-01	-	-
	Manganese and compounds	-	4.01E+00	-
	Mercury Vapor	-	2.18E-04	-
	Nickel Metal	-	2.22E-01	-
ES-U2SorbSilo Model ID ESU2A	Arsenic and inorganic arsenic compounds	1.85E-01	-	-
	Beryllium	1.95E-01	-	-
	Cadmium	1.90E-01	-	-
	Manganese and compounds	-	4.01E+00	-
	Mercury Vapor	-	2.18E-04	-
	Nickel Metal	-	2.22E-01	-
ES-U1WHopper1 , ES-U1Whopper2, ES-U1Whopper3 Model ID ESU1B	Arsenic and inorganic arsenic compounds	1.85E-01	-	-
	Beryllium	1.95E-01	-	-
	Cadmium	1.90E-01	-	-
	Manganese and compounds	-	4.01E+00	-
	Mercury Vapor	-	2.18E-04	-
	Nickel Metal	-	2.22E-01	-
ES-U2WHopper1 , ES-U2Whopper2, ES-U1Whopper3 Model ID ESU2B	Arsenic and inorganic arsenic compounds	1.85E-01	-	-
	Beryllium	1.95E-01	-	-
	Cadmium	1.90E-01	-	-
	Manganese and compounds	-	4.01E+00	-
	Mercury Vapor	-	2.18E-04	-
	Nickel Metal	-	2.22E-01	-
ES-TS-1 Model ID DFABAG	Arsenic and inorganic arsenic compounds	1.79E+00	-	-
	Beryllium	2.03E+00	-	-
	Cadmium	3.23E-01	-	-
	Manganese and compounds	-	3.73E+00	-
	Mercury Vapor	-	4.71E-03	-
	Nickel Metal	-	1.42E+00	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
	Soluble Chromate Compounds as Chromium VI Equivalent	-	1.67E-01	-
SILO-3 and SILO-5 Model ID SILO3-5 Redundant bagilter CD-BF-6 on SILO-3 and SILO-5	Arsenic and inorganic arsenic compounds	1.37E+01	-	-
	Beryllium	1.55E+01	-	-
	Cadmium	2.47E+00	-	-
	Manganese and compounds	-	2.85E+01	-
	Mercury Vapor	-	3.61E-02	-
	Nickel Metal	-	1.09E+01	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	1.28E+00	-
DOME-1 (Storage Dome) Model ID DOME-1	Arsenic and inorganic arsenic compounds	9.46E+00	-	-
	Beryllium	1.08E+01	-	-
	Cadmium	1.71E+00	-	-
	Manganese and compounds	-	1.97E+01	-
	Mercury Vapor	-	2.50E-02	-
	Nickel Metal	-	7.52E+00	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	8.82E-01	-
SILO-3 (Ash Silo 3) Model ID SILO-3	Arsenic and inorganic arsenic compounds	2.73E+01	-	-
	Beryllium	3.11E+01	-	-
	Cadmium	4.94E+00	-	-
	Manganese and compounds	-	5.70E+01	-
	Mercury Vapor	-	7.21E-02	-
	Nickel Metal	-	2.17E+01	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	2.55E+00	-
SILO-4 (Ash Silo 4) and DFAL-4a (Dry Flyash Truck Loadout) Model ID SILO-4	Arsenic and inorganic arsenic compounds	6.31E+00	-	-
	Beryllium	7.17E+00	-	-
	Cadmium	1.14E+00	-	-
	Manganese and compounds	-	1.32E+01	-
	Mercury Vapor	-	1.66E-02	-
	Nickel Metal	-	5.02E+00	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	5.88E-01	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
SILO-5 (Ash Silo 5) Model ID SILO-5	Arsenic and inorganic arsenic compounds	2.73E+01	-	-
	Beryllium	3.11E+01	-	-
	Cadmium	4.94E+00	-	-
	Manganese and compounds	-	5.70E+01	-
	Mercury Vapor	-	7.21E-02	-
	Nickel Metal	-	2.17E+01	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	2.55E+00	-
IES-70 Gypsum Radial Stacker Model ID GYPSTACKR	Arsenic and inorganic arsenic compounds	4.20E-01	-	-
	Cadmium	4.99E-01	-	-
	Manganese and compounds	-	3.26E+01	-
	Mercury Vapor	-	7.84E-03	-
	Nickel Metal	-	3.33E-01	-
IES-l Railcar Coal Unloading, Two Coal Drops Model ID RAILCAR, BUNKDROP, PILEDROP	Arsenic and inorganic arsenic compounds	1.67E+01	-	-
	Beryllium	1.89E+01	-	-
	Cadmium	3.02E+00	-	-
	Manganese and compounds	-	3.48E+01	-
	Mercury Vapor	-	4.40E-02	-
	Nickel Metal	-	1.33E+01	-
I-60 FGD Gypsum Landfill Drop Model ID GYPLAND, GYPDROP	Arsenic and inorganic arsenic compounds	8.40E-01	-	-
	Cadmium	9.99E-01	-	-
	Manganese and compounds	-	6.53E+01	-
	Mercury Vapor	-	1.57E-02	-
	Nickel Metal	-	6.66E-01	-
DFAL-4b Dry Flyash Truck Loadout Model ID DFAL-4b	Arsenic and inorganic arsenic compounds	6.31E+00	-	-
	Beryllium	7.17E+00	-	-
	Cadmium	1.14E+00	-	-
	Manganese and compounds	-	1.32E+01	-
	Mercury Vapor	-	1.66E-02	-
	Nickel Metal	-	5.02E+00	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	5.88E-01	-
	Arsenic and inorganic arsenic compounds	1.90E-01	-	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
WFAL-3 Model ID WFAL-3	Beryllium	2.15E-01	-	-
	Cadmium	3.43E-02	-	-
	Manganese and compounds	-	3.95E-01	-
	Mercury Vapor	-	5.00E-04	-
	Nickel Metal	-	1.51E-01	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	1.77E-02	-
WFAL-5 Model ID WFAL-5	Arsenic and inorganic arsenic compounds	1.90E-01	-	-
	Beryllium	2.15E-01	-	-
	Cadmium	3.43E-02	-	-
	Manganese and compounds	-	3.95E-01	-
	Mercury Vapor	-	5.00E-04	-
	Nickel Metal	-	1.51E-01	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	1.77E-02	-
IES-73 FGD Gypsum Landfill Model ID GYPPILE	Arsenic and inorganic arsenic compounds	4.20E-01	-	-
	Cadmium	4.99E-01	-	-
	Manganese and compounds	-	3.26E+01	-
	Mercury Vapor	-	7.84E-03	-
	Nickel Metal	-	3.33E-01	-
I-60 Ash Landfill Model ID ASHLAND2 and IES -2 Ash Landfill Model ASHLAND	Arsenic and inorganic arsenic compounds	1.98E+03	-	-
	Beryllium	2.24E+03	-	-
	Cadmium	3.57E+02	-	-
	Manganese and compounds	-	4.12E+03	-
	Mercury Vapor	-	5.21E+00	-
	Nickel Metal	-	1.57E+03	-
	Soluble Chromate Compounds as Chromium VI Equivalent	-	1.84E+02	-
IES-2, I-60 Truck Ash Dump Model ID ASHDROP	Arsenic and inorganic arsenic compounds	1.05E+00	-	-
	Beryllium	1.20E+00	-	-
	Cadmium	1.90E-01	-	-
	Manganese and compounds	-	2.20E+00	-
	Mercury Vapor	-	2.78E-03	-
	Nickel Metal	-	8.37E-01	-

Emission Source	Toxic Air Pollutant	Emission Limit		
		(lb/yr)	(lb/day)	(lb/hr)
	Soluble Chromate Compounds as Chromium VI Equivalent	-	9.82E-02	-
IES-1 Coal Storage Pile Model ID COALP	Arsenic and inorganic arsenic compounds	1.32E+00	-	-
	Beryllium	1.50E+00	-	-
	Cadmium	2.38E-01	-	-
	Manganese and compounds	-	2.75E+00	-
	Mercury Vapor	-	3.48E-03	-
	Nickel Metal	-	1.05E+00	-
I-60, IES-67, IES-68, IES-69, IES-71, IES-73 Gypsum Pile Model ID GYPPILE	Arsenic and inorganic arsenic compounds	4.20E-01	-	-
	Cadmium	4.99E-01	-	-
	Manganese and compounds	-	3.26E+01	-
	Mercury Vapor	-	7.84E-03	-
	Nickel Metal	-	3.33E-01	-
ES-PIGGING Model ID FLARE, PIG RECEIVER	Ethyl Mercaptan	-	-	1.02E+01
	n-hexane	-	9.68E+04	-

Monitoring/Recordkeeping/Reporting

b. No monitoring, recordkeeping, or reporting shall apply to any emission sources included in Section 2.2 D.1.a above.

STATE-ONLY REQUIREMENT

2. 15A NCAC 02Q .0711: EXISTING FACILITES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT

a. As of Permit Issuance Date emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 02Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.

b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.

c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100 "Control of Toxic Air Pollutants".

d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A

NCAC 02Q .0711.

e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
benzo(a)pyrene	2.2			
dichlorobenzene				16.8
toluene		98.0		14.4

E. Two natural gas/coal-fired electric utility boilers equipped with alkaline-based fuel additive (ID Nos. ES-1 and ES-2), and associated flue gas conditioning systems (ID Nos. CD-1, CD-1A, CD-4, and CD-4A), low NOx burner systems (ID Nos. CD-2 and CD-5), SCR (ID Nos. CD-2A and CD-5A), hydrated lime dry sorbent injection (ID Nos. CD-U1DSI and CD-U2DSI, electrostatic precipitators (ID Nos. CD-3 and CD-6), and wet Flue Gas Desulfurization systems (ID Nos. CD (U1FGDa), CD (U1FGDb), CD (U2FGDa) and CD (U2FGDb))

Two natural gas-fired auxiliary boilers (ID Nos. ES-3 and ES-4)

Four natural gas-fired, natural gas supply line heaters (ID Nos. ES-34a, ES-34b, ES-34c and ES-34d)

Natural gas supply line pigging operation including fugitive emissions from pig receiver vent (ID No. ES-PIGGING) with associated temporary flare of natural gas from supply line (ID No. CD-PIG FLARE)

1. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

a. Pursuant to 15A NCAC 02Q .0501(b)(2) or (c)(2), for completion of the two-step significant modification process initiated by Application No. (8500004.18A), the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date the first of these sources (**ID Nos. ES-1, ES-2, ES-3, ES-4, ES-34a, ES-34b, ES-34c, ES-34d or ES-PIGGING)** begins to burn natural gas.

Reporting [15A NCAC 02Q .0508(f)]

b. The Permittee shall notify the Regional Office in writing of the date of beginning of burning natural gas in these sources (**ID Nos. ES-1, ES-2, ES-3, ES-4, ES-34a, ES-34b, ES-34c, ES-34d and ES-PIGGING)**, postmarked no later than 30 days after such date.

2.3- Permit Shield for Non-Applicable Requirements

This condition is to clarify that issuance of this permit provides no shield from the Act, or regulations promulgated thereunder, including state regulations, pertaining to requirements of the New Source Performance Standards or major or minor new source preconstruction review requirements, which EPA is

currently alleging or may allege in the future as having been violated by the Permittee. The permit may be subject to reopening to include a compliance plan and schedule addressing any judicial or administrative order establishing new applicable requirements arising out of past or ongoing noncompliance with those provisions for any affected emission units.

The Permittee is shielded from the following non-applicable requirements as of the date of issuance of this permit based on information furnished with all previous applications. This shield does not apply to future modifications or changes in the method of operation. [15A NCAC 02Q .0512(a)(1)(B)]

A. The following requirements are not applicable to boilers ID Nos. ES-1 and ES-2; nor auxiliary boilers ES-3 and ES-4:

1. 15A NCAC 02D .0501(c)(11), testing for mercury emissions, is not applicable because 15A NCAC 02D .0537, A Control of Mercury Emissions, does not apply to fuel combustion.

2. 15A NCAC 02D .0501(c)(14), testing for sources for which emissions are based on process rates, is not applicable because emissions for these sources are not based on process rates.

3. 15A NCAC 02D .0521(d), visible emissions shall not exceed 20% opacity, is not applicable because these sources were manufactured as of July 1, 197l.

4. 15A NCAC 02D .0607, calibration and maintenance requirements do not apply as these sources do not combust wood and wood-fossil fuels.

5. 15A NCAC 02D .1110, NESHAP promulgated in 40 CFR Part 61, is not applicable because no Part 61 NESHAP evaluation has been triggered.

6. 15A NCAC 02D .0902(c), applicability of VOC rules to sources in non-attainment areas, is not applicable because there are no rules applicable to these sources in 02D .0900.

7. 15A NCAC 02D .0902(f)(1), exemptions from VOC rules in 15A NCAC 02D .0900, are not applicable because there are no rules applicable to these sources in 02D .0900.

8. 15A NCAC 02D .0903(b) and (c), recordkeeping on VOC emissions and control equipment, is not applicable because there are no rules applicable to these sources in 02D .0900.

9. 15A NCAC 02D .0903(d)(2), recordkeeping on VOC source compliance, is not applicable because there are no rules applicable to these sources in 02D .0900.

10. 15A NCAC 02D .0903(e), recordkeeping on VOC, is not applicable because there are not rules applicable to these sources in 02D .0900.

11. 15A NCAC 02D .0912(c), testing on VOC, is not applicable because there are no rules applicable to these sources in 02D .0900.

12. 15A NCAC 02D .0912(d), reporting on VOC and corrective actions, is not applicable because there are no rules applicable to these sources in 02D .0900.

13. 15A NCAC 02D .0912(e), testing on VOC, is not applicable because there are no rules applicable to these sources in 02D .0900.

14. 15A NCAC 02D .0939(a), testing for VOC for sources subject to 02D .0912, is not applicable because there are no rules applicable to these sources in 02D .0900.

15. 15A NCAC 02D .0939(b), testing for VOC for sources subject to 02D .0912, is not applicable because there are no rules applicable to these sources in 02D .0900.

16. 15A NCAC 02D .1400, NOX requirements for non-attainment counties, is not applicable because Stokes County is not a non-attainment area.

17. 15A NCAC 02Q .0508(p)(1), recordkeeping on alternative operating scenarios, is not applicable because there are no alternative operating scenarios.

B. The following requirements are not applicable to auxiliary boilers ES-3 and ES-4:

1. 15A NCAC 02D .0501(c)(7), compliance testing for nitrogen oxides, is not applicable because there are no nitrogen oxide requirements applicable to these sources.

2. 15A NCAC 02D. 0501(c)(16), particulate testing for steam generators which do soot blowing shall determine the contribution of soot blowing, is not applicable to these sources as these source do not soot blow.

3. 15A NCAC 02D .0519, nitrogen oxide emission limits, is not applicable because the auxiliary boilers are non-NSPS applicable boilers with a heat input rating of less than 250 million Btu per hour each.

4. 15A NCAC 02D .0535(d) and (e), malfunction abatement plan requirements and submittal, is not applicable because the plan is only required for electric utility boilers.

5. 15A NCAC 02D .0536, emission limits for particulate matter from utility boilers, is not applicable because these sources are not utility boilers.

6. 15A NCAC 02D .0606, monitoring of fossil-fired steam generators in accordance with Appendix P of 40 CFR Part 51, is not applicable because the auxiliary boilers have a heat input of less than 250 million Btu per hour each.

7. 15A NCAC 02D .0608, sulfur dioxide emissions from other coal or residual oil burners, is not applicable because these sources do not burn coal or residual oil.

8. 15A NCAC 02Q .0401, implementation of Phase II of the federal acid rain program pursuant to the requirements of Title IV of the Clean Air Act as provided in 40 CFR Part 72, is not applicable because these sources are not utility units.

9. 15A NCAC 02D .0524, NSPS promulgated in 40 CFR Part 60, is not applicable because these sources have not triggered NSPS requirements.

2.4- Phase II Acid Rain Permit Requirements

ORIS code: 8042
Effective: February 6, 2017 until January 31, 2022

A. Statement of Basis

Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q .0400 and 02Q .0500, and other applicable Laws.

B. SO_2 Allowance Allocations and NO_x Requirements for each affected unit

		2012 – 2016	2017 onwards
Boiler ID No. 1	SO_2 allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	30,966*	*
	NO_X limit	Pursuant to 40 CFR 76.11, the Division of Air Quality approves a NO_X emissions averaging plan for this unit, effective from calendar years TBD until TBD. Under the plan, the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for the plan year, then this unit shall be deemed to be in compliance for the year with its alternative contemporaneous annual emission limitation and annual heat input limit. If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for the plan year and if this unit fails to meet the annual average alternative contemporaneous emission limitation of **0.250 lb/MMBtu** or has an annual heat input greater than **26,834,070 MMBtu**, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.	

		2012 – 2016	2017 onwards
Boiler ID No. 2	SO_2 allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	32,616*	*
	NO_X limit	Pursuant to 40 CFR 76.11, the Division of Air Quality approves a NO_X emissions averaging plan for this unit, effective from calendar years 2012 through 2017. Under the plan, the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for the plan year, then this unit shall be deemed to be in compliance for the year with its alternative contemporaneous annual emission limitation and annual heat input limit. If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for the plan year and if this unit fails to meet the annual average alternative contemporaneous emission limitation of **0.250 lb/MMBtu** or has an annual heat input greater than **27,664,080 MMBtu**, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.	

* The number of allowances allocated to Phase II-affected units by U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

C. Comments, Notes and Justifications

None.

D. Phase II Permit Applications and Phase II NO_X Compliance Plan (attached)

The permit applications submitted for this facility, as approved by the Division of Air Quality, are part of this permit. The owners and operators of these Phase II acid rain sources must comply with the standard requirements and special provisions set forth in the following attached application:

Acid Rain Permit Application dated December 4, 2015
Phase II NO_X Compliance Plan and Averaging Plan dated June 23, 2015

2.5- Section 112(r) of the Clean Air Act – Risk Management Plan

15A NCAC 02D .2100: RISK MANAGEMENT PROGRAM

a. The Permittee is subject to Section 112(r) of the Clean Air Act and shall comply with all applicable requirements in accordance with 40 CFR Part 68.

Recordkeeping/Reporting [15A NCAC 02D .2104]

b. The Permittee shall submit an update to the Risk Management Plan (RMP) to EPA pursuant to 40 CFR 68.150 no later than July 2017[3], or as specified in 40 CFR 68.10.
c. The Permittee shall revise and update the RMP submitted under 40 CFR 68.150 no later than July 2017 and at least every five years after that date or most recent update as required by 40 CFR 68.190(b)(2) through (b)(7), whichever is later.
d. When the Permittee submits the annual Compliance Certification required by General Condition P, the Permittee shall include a statement that the facility is in compliance with all requirements of 15A NCAC 02D .2100.

3 At the time this Permit was issued, the Permittee most recently updated the Risk Management Plan in July 2012.

SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
   The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
   The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
   The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
   The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
   Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]
The Permittee shall be subject to the following provisions with respect to emergencies:
1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available

for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.

3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
   i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
   ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
   iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BTU	British thermal unit
CAA	Clean Air Act
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CSAPR	Cross State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TPY	Tons Per Year
VOC	Volatile Organic Compound

Acid Rain Permit Application

(five pages)

Acid Rain Permit NOx Compliance and Averaging Plan

(Six pages)